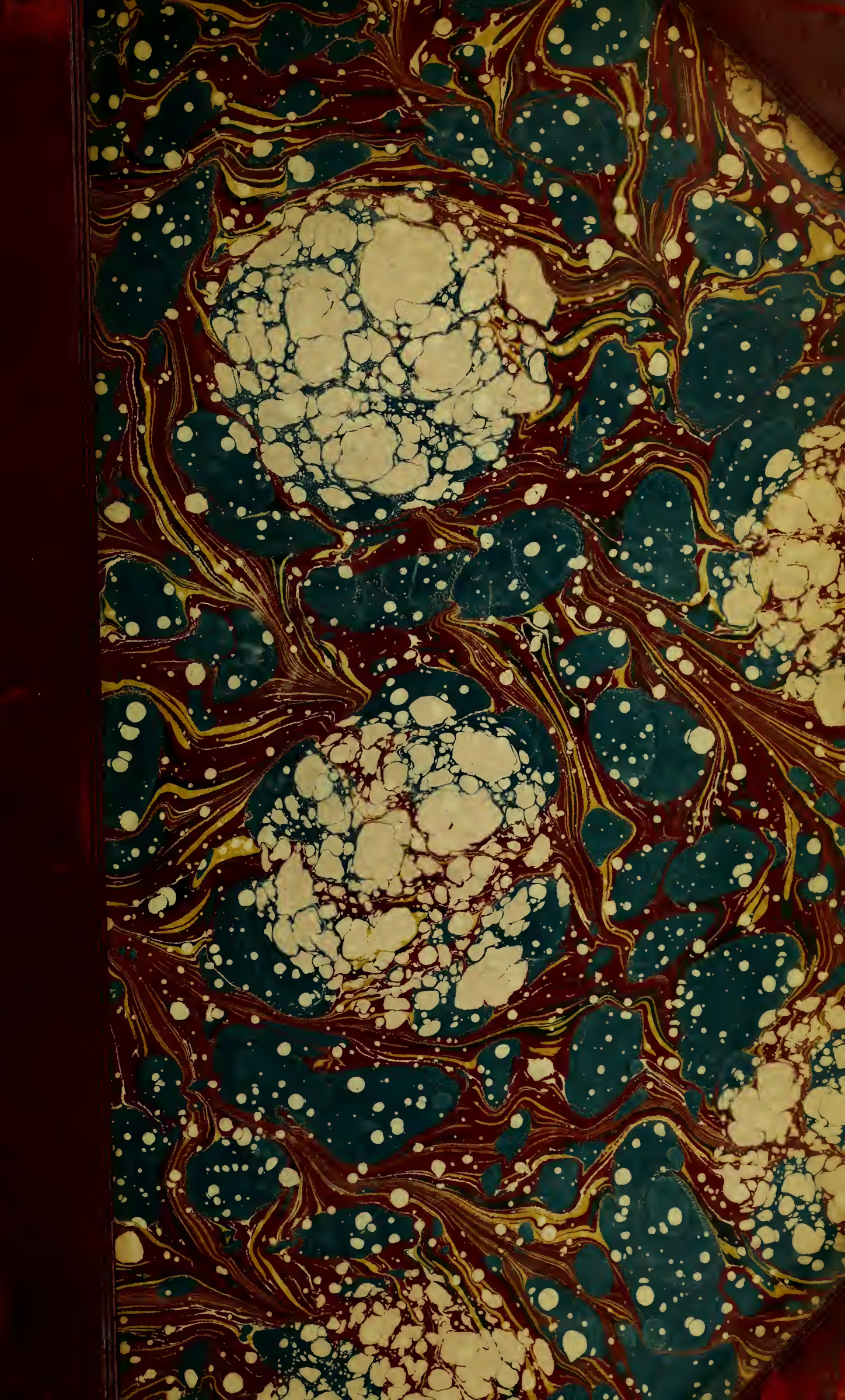

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REPORT

FROM THE

SELECT COMMITTEE

ON

THE VACCINE BOARD:

WITH

THE MINUTES OF EVIDENCE

AND AN

APPENDIX.

Ordered, by The House of Commons, *to be Printed,*
28 *August* 1833.

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12 MAR 1969
AND TROPICAL MEDICINE

Jovis, 7° die Martii, 1833.

VACCINE BOARD.

Ordered,

That a Select Committee be appointed to inquire into the expediency of continuing the Vaccine Board:—And a Committee is appointed, of

Mr. Warburton.	Sir Robert Peel.
Mr. Lamb.	Mr. Rice.
Mr. Ewart.	Mr. Strutt.
Mr. Hume.	Mr. John Marshall.
Mr. Littleton.	Mr. Law Hodges.
Dr. Baldwin.	Mr. George Sinclair.
Lord Oxmantown.	Mr. Pease.
Mr Charles Buller.	Mr. Robert Wallace.
Mr. Labouchere.	Mr. Edward Romilly.
Mr. Robert Ferguson.	Mr. Mark Phillips.
Lord Ashley.	Mr. Halford.
Mr. Richard Potter.	

Ordered,

That the Committee do report Minutes of Evidence from time to time to the House.

Ordered,

That Five be the Quorum of the Committee.

Veneris, 8° die Martii, 1833.

Ordered,

That the Committee have power to send for persons, papers and records.

Veneris, 23° die Augusti, 1833.

Ordered,

That the Committee have power to report their opinion to the House.

THE REPORT - - - - - - - - - - - p. iii

MINUTES OF EVIDENCE - - - - - - - - - p. 1

APPENDIX - - - - - - - - - - - - p. 135

REPORT.

THE SELECT COMMITTEE appointed to inquire into the expediency of continuing the VACCINE BOARD, and who were empowered to report their Opinion thereupon, together with the MINUTES of EVIDENCE taken before them;—HAVE called before them several Witnesses, among whom were the principal Officers of the National Establishment, and of the private Societies instituted in *London* for promoting Vaccination; and after considering the Evidence, have agreed to the following REPORT:

THE object of establishing the National Vaccine Institution, as declared in Parliament, in 1808, by those who promoted its first institution, was, to forward the general adoption of Vaccination throughout the Empire, by giving to the practice the public countenance and support of Government. To most persons of intelligence the results of experience, both at home and abroad, appeared, even at that time, decisive of the great advantages of Vaccination; but whether or no it were infallible as a preventive of Small-pox was a question still involved in uncertainty. In order, therefore, to ascertain with precision the facts by which those doubts might be dispelled, to conduct such investigations under the eye of the Public, and to insure accuracy to the publication of the results when ascertained, it was proposed that all cases of reputed failure should be referred to the Board. The Board were also to organize and set in action a central Institution for carrying on in London, under their own immediate superintendence, the practice of Vaccination, and for distributing Vaccine Lymph to every part of the Empire.

The present objects of the Board, as stated to the Committee by the principal Officers of the Establishment, are, to observe the effects of Vaccination in preventing the recurrence and spread of Small-pox; to investigate cases of reputed Small-pox recurring after reputed Vaccination, and of Cow-pox, when attended with inflammation, or any eruptive disorder, or when, in any other respect, anomalous in character; to preserve, by immediately superintending the practice of Vaccination in London, an authentic form of the Vaccine Disease, on a scale commensurate to the demands for Lymph; to furnish a supply of Lymph instantly on application; to inquire into the circumstances under which Lymph has been obtained in cases of its failing to produce the Cow-pox; to establish among Medical Practitioners an approved mode of Vaccinating, and generally to discountenance the practice of Variolous Inoculation and to encourage the practice of Vaccination.

The following has, at different periods, been the Constitution of the Managing Board of the National Establishment. From 1808 to 1826, the Physicians and Surgeons, who, by virtue of the offices they held in their respective Colleges, were members of the Board, were eight in number, viz. the President and four Censors of the College of Physicians, and the Master and two Governors of the College of Surgeons. In 1826, in consequence of a recommendation from the Secretary of State of the

Home Department, the number of members was reduced to five, who from that time to 1832 were the President and two Senior Censors of the College of Physicians and the President and one Vice-President of the College of Surgeons. In 1832, in consequence of another suggestion from the Home Office, this number was further reduced to three, and at present consists of the President and Senior Censor of the College of Physicians and the President of the College of Surgeons. The present number of the Board cannot, in the opinion of the President of the College of Physicians, be further reduced, without lessening its efficiency. From the first establishment of the Board until the present time each *ex officio* member of the Board has received the salary of 100 *l.* a year.

The Registrar and the Executive Officers of the Establishment are appointed by the Managing Board, who determine what shall be the number, the duties, and salaries of the offices to which they appoint.

The following is a comparative view of the whole Establishment and Expenditure of the Board at the two periods of 1821 and 1832, arranged under the heads of Staff; Rent, Taxes, &c. of House; Stationary Vaccinators and Miscellaneous Expenditure.

1821:	£.	£.
President and four Censors of the College of Physicians	500	
Master and two Governors of the College of Surgeons	300	
Registrar of the Board	300	
Director	200	
Secretary	50	
Messenger	52	
Housekeeper	40	
TOTAL STAFF		£. 1,442
Rent of Furnished House		260
Thirteen Stationary Vaccinators; viz.		
One at 150 *l.*	150	
Five at 100 *l.*	500	
One at 75 *l.*, including allowance for rent	75	
Six at 50 *l.*	300	
		1,025
Miscellaneous Expenditure		183
TOTAL, 1821		£. 2,910

1832:	£.	£. s. d.
*President and two Censors of the College of Physicians	300	
President and Vice-President of the College of Surgeons	200	
Registrar of the Board	200	
Inspector of Vaccination	200	
Secretary	50	
Treasurer	25	
Messenger	55	
TOTAL STAFF		1,030 – –
†Rent, Taxes and Repairs of Unfurnished House		204 9 11
Twelve Stationary Vaccinators; viz.		
Two at 150 *l.*	300	
Two at 100 *l.*	200	
Eight at 50 *l.*	400	
Allowance of Rent to one Vaccinator	10	
		910 – –
Miscellaneous Expenditure		177 – –
TOTAL, 1832		£. 2,321 9 11

The sum actually voted in Supply by Parliament, in support of the Establishment, was from 1809 to 1827, inclusive - - £. 3,000
The Vote was reduced from 1828 to 1831, inclusive, to - 2,500
And was further reduced in the Estimates of 1832 and 1833 to 2,200

The

* The Physicians are elected to their Offices in September and the Surgeons in July, and consequently are paid their Salaries after the Audit of Accounts. It is proposed by the Managing Board to reduce the number, and consequently the expense, of the Board in 1833, as follows; viz.
The President and one Censor of the College of Physicians - - £. 200
The President of the College of Surgeons - - - - - - 100
£. 300

When these reductions are effected the Annual Expenditure will be about 2,100 *l.*

† The first term of the lease expires at Lady-day 1834.

The meetings of the Board have been held on the average, during the last five years, about once a fortnight, as appears from their minute book. The average number of Members attending the meetings during that period has been three, and the average number of letters or communications taken into consideration by the Board at each meeting during the same period has been four.

The ordinary business of the Board consists in receiving the Registrar's Report of the letters addressed to the Board, and in directing the answers to be written; in receiving the Inspector's Report respecting the Stationary Vaccinators, and the distribution of Lymph; in nominating and electing the Vaccinators, and in fixing their Stations, Duties and Salaries; in appointing persons to be Extraordinary or Corresponding Vaccinators; and in directing inquiry to be made by the Registrar or Inspector concerning the failure of Lymph to produce Cow-pox, or concerning cases of Cow-pox anomalous in character, or of Small-pox after Vaccination. These matters, with the consideration of the Report to be annually laid before Parliament, constitute the mass of business that comes before the Board.

The Registrar and the Inspector are permanent Officers appointed by the Board, each receiving a salary of 200 *l.* a year. The Registrar superintends the correspondence of the Board on all matters relating to Vaccination, attends all their meetings, selects from the mass of the correspondence such letters as in his opinion require their consideration, receives their instructions as to what answers he shall write, and records the minutes of the Board's proceedings.

The Inspector, besides his Salary, has, by way of emolument, the house, which is the central station of the Board, to live in, and allowance of coal and candles. He superintends the Stationary Vaccinators, occasionally visits their stations and examines their books. He receives the returns of the number of Patients they Vaccinate, and of the charges of Lymph they distribute. He requires and receives from the Vaccinators supplies of Lymph adequate to the demand made upon the Board; incloses the charges in covers, which he sends to the Secretary of State's Office, to be from thence forwarded, post-free, to the applicants. He incloses in every packet of Lymph the printed instructions of the Board, in which the applicant is directed how to use the Lymph, is requested to inform the Board with what success he has used it, and is earnestly recommended to endeavour to keep up his own supply of Lymph, by maintaining a constant succession of Patients under Vaccination.

The Stationary Vaccinators of the Board are 12 in number, two of whom receive a salary of 150 *l.*, two of 100 *l.* and eight of 50 *l.* a year. The two who receive the highest salary are Mr. Carpue, the Vaccinator at the Central Station, who attends to Vaccinate one hour a day, six times a week, and Mr. Gilham, the Vaccinator at Rowland Hill's Chapel, who attends two hours a day, three times a week, and is stated to be the most active and persevering of all the Vaccinators of the Board. The names of the Stationary Vaccinators, their several stations, the number of days in the week and the number of hours in the day they each attend, the number of patients they each Vaccinate, and of the charges of Lymph they each distribute, and the salaries they severally receive, are given in the annexed Table. Each Stationary Vaccinator is required, under pain of dismissal in case of failure, to keep up his own supply of Lymph, by preserving a constant succession of patients, and to furnish the Board with Lymph on the requisition of the Inspector.

TABLE OF THE STATIONARY VACCINATORS.

NAMES.	STATIONS.	DAYS.	HOURS.	Number Vaccinated, 1832.	Charges in 1832.	SALARIES.
						£.
J. A. Gilham	Rowland Hill's Chapel, Blackfriars-road	Tuesday, Thursday and Saturday	1 to 3	3,761	22,883	150
E. Leese	16, Baker-st., Portman-square	Monday and Friday	10	2,254	5,252	100
J. C. Carpue	8, Russell-place, Fitzroy-square	Every day but Sunday	10 to 11	1,545	28,368	150
R. Robertson	53, Jermyn-street, St. James's	Monday and Thursday	1	1,376	6,950	50
N. B. Ward	7, Wellclose-square	Tuesday & Saturday	9 to 11	1,318	2,917	50
J. Harkness	Fitzroy-sq., Broad-street, Ratcliff	Monday and Friday	9 to 11	756	3,441	50
J. Lewis	Spital-square	Monday and Thursday	9	624	11,508	50
F. Ager	141, High-street, Whitechapel	Monday and Friday	9	615	4,021	50
C. R. Aikin	7, Baker's-buildings, Liverpool-street	Monday, Wednesday and Friday	10	592	2,379	100
R. Semple	2, Rafford's-row, Islington	Tuesday, Thursday and Saturday	10 to 11	552	5,985	50
H. Sterry	Alscot-place, Grange-road, Bermondsey	Tuesday and Saturday	9 to 10	451	1,387	50
J. Barnett	Charter-house-square	Monday and Friday	9	346	5,422	50
				14,190	100,513	900

The Extraordinary Vaccinators of the Board are Practitioners appointed by the Board to Vaccinate in London, without salary. The Stationary Vaccinators are usually selected from this List.

The Corresponding Vaccinators of the Board are practitioners in the country, who on account of their zeal in promoting Vaccination have the honour conferred upon them by the Board of being placed in this List. The appointment by the Board of Corresponding Vaccinators in England and Wales is almost exclusively restricted to such practitioners as are Members of the College of Surgeons of London.

Besides the National Establishment there are two private Institutions in London for promoting Vaccination, the Small-pox Hospital, at King's Cross, St. Pancras, and the London Vaccine Institution or Jennerian Society.

The Hospital at King's Cross was originally founded for the reception of patients attacked by casual Small-pox, and for diffusing Inoculation among the poor of London. In 1799 this Institution began to Vaccinate out-patients; in 1808 it ceased to Inoculate out-patients, and Vaccinated them instead; and in 1822 it discontinued Inoculation upon in-patients also. The income of the Hospital is about 1,100 *l.* a year, three-fourths of which arise from dividends on invested capital, and the remainder from the contributions of individuals and other casual sources. The principal charge on this income arises from the maintenance of the Small-pox Wards, to which, in 1832, 330 patients were admitted. During the same year at the Vaccine Station of the Hospital there were Vaccinated 3,701 persons, and Lymph was distributed to 1,443 applicants. The Hospital supplies Lymph gratuitously to all applicants, and contemplates establishing several Branch Vaccine Stations in London.

The London Vaccine Institution was founded in 1806 by certain subscribers to the Royal Jennerian Society, who, owing to dissensions in the

the Society, (of which some account is given in the Evidence,) seceded. The original Royal Jennerian Society was established in 1803, and until 1806 was well supported; but by the secession of many of its subscribers at the period above referred to, it was brought to the verge of dissolution, and was finally dissolved in the year 1809, almost immediately on the founding of the National Establishment. Another Society, having the same name, was established in 1813 by certain Life Governors of the original Society, who were also connected with the London Vaccine Institution. These two Institutions, bearing different names, appear now to subsist under one common management, though separate Reports relating to income and expenditure are made to the subscribers of each Institution; but this practice, it is stated, is about to be discontinued, and henceforward a consolidated account is to be presented to the subscribers. The joint Income of the two Institutions was, in 1832, 894 *l.* 16 *s.* 6 *d.*, and was derived entirely from private contributions. The Expenditure for the same year was 871 *l.* 16 *s.* 5 *d.*, at which cost three stations in London were maintained, 5,641 patients Vaccinated, and 43,000 charges of Lymph distributed. One Vaccinator is deemed sufficient for the three stations, each of which is open for nearly an hour five days in every week. It is to subscribers only, or by order of subscribers, that Vaccine Lymph is supplied free of charge, but the Superintendent is not bound to adhere strictly to this regulation. A large proportion of the Subscribers are wholesale Druggists in London, or Medical Practitioners. Partly owing to the foregoing regulation, and partly to another regulation which requires Correspondents to pay the postage of letters, the greater number of applications for Lymph by Practitioners in the country are made through the medium of wholesale Druggists, Subscribers to the Institution. For the details of the Expenditure of this Institution the Committee refer to the Appendix.

The extent to which in the year 1832 Vaccination was practised in London by the National Establishment, the Hospital at King's Cross, and the London Vaccine Institution, is shown in the following Table:

	Number of Persons Vaccinated.	Number of Charges of Lymph supplied.	Number of Applicants supplied with Lymph.
By the National Establishment -	14,190	100,513	6,852
By the Hospital at King's Cross -	3,701	no return	1,443
By the London Vaccine Institution -	5,641	43,164	no return
TOTAL - - -	23,532	—	—

To the total number Vaccinated at these Institutions, viz. 23,532, must be added the number privately Vaccinated, to obtain the Total Vaccinated in London. The number of registered births in the Metropolitan parishes, on the average of the years 1830, 1831 and 1832, was about 35,000. If from this number we deduct the number of infants who die within a few months after birth, the remainder will probably afford a result not very far exceeding the sum of those who, at the Vaccine Institutions and in private, undergo Vaccination.

The effect of Vaccination, thus extensively practised, on the prevalence of Small-pox in the Metropolis will be rendered evident by the following Table, which exhibits, during successive periods of 10 years previous and subsequent to the first introduction of Vaccination, in the parishes lying within the Bills of Mortality, the average Total Annual Mortality, the

average Annual Mortality from Small-pox, and in every 1,000 Deaths the proportionate number of Deaths from Small-pox:

	TOTAL Mortality.	Mortality from Small-pox.	Proportion of Deaths from Small-pox in every 1,000 Deaths.	Year of Census.	Population of Parishes within Bills of Mortality.
Average of 10 years, from 1770 to 1780 - - -	21,591	2,204	102	—	—
Ditto from 1780 to 1790 - -	19,517	1,712	88	—	—
Ditto from 1790 to 1800 - -	19,177	1,768	92	—	—
Ditto from 1800 to 1810 - -	18,891	1,374	73	1801	746,953
Ditto from 1810 to 1820 - -	19,061	833	43	1811	855,626
Ditto from 1820 to 1830 - -	20,680	715	35	1821	1,011,951
Average of three years, from 1830 to 1832. - - -	25,196	654	26	1831	1,180,075

* From this Table it appears that the proportionate mortality from Small-pox, which before 1800, when Vaccination began, was about one in every 10 Deaths, is now reduced to about three in every 100 Deaths, and is therefore only between one-third and one-fourth of what it was prior to the introduction of Vaccination.

The effect of Vaccination in diminishing the Deaths from Small-pox in a mixed population, composed partly of persons who have been Vaccinated, and partly of persons who have not, has been made apparent in the foregoing abstract from the Bills of Mortality. With regard to those who have undergone Vaccination, the Committee have not been able to learn with precision in what proportion they are liable to Small-pox, nor in what proportion cases of Small-pox after Vaccination are fatal. A Return has been made by the National Establishment, purporting to give, as the result of their experience during the last seven years, the number of patients Vaccinated by each Stationary Vaccinator, and out of those patients the number who, to the knowledge of the Vaccinator, were subsequently affected by modified Small-pox. The proportion, as stated by the different Vaccinators, varies from seven cases in 10,000 up to 70; nor, considering how the information is obtained on which the Return is founded, is this wide difference in their statements to be wondered at. Such a Return, to justify the drawing any certain conclusion from it, should be founded on a sedulous inquiry, tracing out for a series of years the history of as many of the Vaccinated patients as possible, in respect to their being or not being subject afterwards to Small-pox. The Return in question appears to rest on that number of medical cases only which have fallen casually under the notice of the Vaccinators. The labour and difficulty that would attend such an inquiry as is above suggested, precludes the possibility

* No similar alteration in the Deaths from Small-pox is to be traced in the Bills of Mortality prior and subsequent to the year 1720, the period of the introduction of Inoculation. The Deaths from Small-pox cannot be traced back beyond 1701, since previous to that year they were entered under the same column with Deaths from Measles.

	TOTAL MORTALITY.	MORTALITY from SMALL-POX.	Proportion in 1,000 who died of Small-pox.
Average of 9 years from 1701 to 1710 - -	21,110	1,045	49
10 — 1710 to 1720 - -	23,826	2,123	89
10 — 1720 to 1730 - -	27,361	2,257	82
10 — 1730 to 1740 - -	26,047	1,978	76
10 — 1740 to 1750 - -	26,060	2,002	77
10 — 1750 to 1760 - -	20,849	1,957	94

possibility of its being undertaken by the Vaccinators of the Board. Considering, therefore, how many cases of Small-pox after Vaccination must escape the notice of the Vaccinator, it is probable that the real proportion of such cases is greater than the greatest proportion stated in any one of the Returns in question; that is, than 7 in 1,000.*

The Return of the National Establishment states also, that during the last seven years, out of 83,647 Vaccinations by the Stationary Vaccinators, two cases only came under their notice in which Small-pox afterwards occurred attended with a fatal result; and in one of these two cases it was doubtful whether the disease was really Small-pox. The objections that were made to the statement of the number of cases of Small-pox after Vaccination, as being inconclusive, will apply also to this Return. More information, however, on this part of the subject has been obtained from Dr. Gregory, Physician to the Small-pox Hospital, who states that out of 1,785 cases of Small-pox admitted into the Hospital in the last seven years, 619 were cases occurring after reputed Vaccination; of the 1,166 remaining patients who had not undergone Vaccination, 494 died; that is, 42 per cent. Of the 619 patients who were reputed to have undergone Vaccination, 40 died; that is, only 6 per cent., which is one-seventh only of the mortality that befel the non-vaccinated patients. The mortality of six per cent. must far exceed the average mortality in Small-pox after Vaccination, since it is only in the worst cases of the disease, and not in the mild and modified form in which it usually appears after Vaccination, that the patient would be thought to require Hospital assistance.

Were it assumed, as a basis on which to calculate, that out of every 100 persons Vaccinated one is attacked by Small-pox, and that out of every 100 such cases five were fatal, it would follow, that out of every 10,000 persons Vaccinated five only, or out of every 2,000 persons Vaccinated one only, would die of Small-pox; but the real proportion is probably much less than this.

Admitting then the efficacy of Vaccination in diminishing the mortality from Small-pox, and in preserving the Vaccinated, in a very great majority of cases, from being attacked by that disease, it cannot be doubted that it is of the greatest importance to maintain and promote the practice of Vaccination; and the Committee have considered in what manner this may best be effected. On examination of the course pursued by the National Establishment, the Small-pox Hospital, and the London Vaccine Institution, it appears that there are two essential points to which the attention and resources of a Society for promoting Vaccination require to be directed; the first regards the providing a supply of Lymph, and the second the distribution of it.

As regards the providing a supply of Lymph, it is necessary, for preserving the Vaccine disease itself, to keep up a constant and uninterrupted succession of patients under Vaccination, and that to an extent adequate to meet the demand for Lymph. This requires to be done, in pursuance of some organized plan, by officers receiving a salary for the regular performance of their duty. The only proper field for carrying such a plan into execution is in the centre of the greatest and densest mass of population. When the inhabitants of a district are few and scattered, the disease cannot be kept alive, since in proportion to the exertions of the Vaccinator to promote Vaccination in his neighbourhood, does the difficulty

* The Return by Mr. Lawrance, from the Royal Military Asylum at Chelsea, (Appendix D.) gives the proportion of 10 in 1,000.

culty increase of finding a regular succession of patients who are susceptible of taking the Cow-pox. From this cause it frequently happens that in the larger provincial towns, in Dublin, and even at some of the London stations, the Vaccinators fail in maintaining a succession of patients. The difficulty of keeping up the supply is greatest in the winter time, partly because the contagion does not then take so well, partly from the unwillingness of parents to carry their children from home in severe weather. The apprehensions expressed by some of the witnesses, that during some winter season the disease may be lost, appear to be groundless; since at that period of the year the precaution may be taken of having armed points in store, which, in case of failure in the succession of patients, may be had recourse to for renewing the disease. In this essential point, which concerns the providing of Lymph, the National Establishment, the Hospital at King's Cross, and the London Vaccine Institution, all agree in practice; viz. in confining the stations where, under the superintendence of the Managing Board or Governors, Vaccination is carried on by salaried medical officers, to London only, and in limiting their efforts, so far as the country is concerned, to the distribution of Lymph.

For the same reason that concentration of means in the largest city of the empire is necessary, in order to maintain a succession of patients, too great a multiplication and proximity of stations in the same city is to be avoided. If too near, they interfere with the maintenance by each Vaccinator of the succession of patients. At the two stations in London where Vaccination is carried on on the largest scale, the station of the Board at Rowland Hill's Chapel, and that of the Small-pox Hospital at King's Cross, about 3,700 persons are Vaccinated in the year. This number is drawn to the latter station from the population inhabiting the surrounding area to the distance of half a mile. Concentration of numbers at each station is expedient for another reason. For the supply of charges of Lymph it is necessary to select healthy children; from the children of the poor, it is stated that it is seldom possible to vaccinate: the children of tradespeople, of the least opulent of the middle class of society, and of the upper class of workmen, are depended upon for this purpose, and in fact are principally brought to the Vaccine stations.

On examining the numbers Vaccinated at the different stations of the National Establishment, in the year 1832, it appears that they vary from 3,761, the number Vaccinated by Mr. Gilham, down to 346; which great disproportion affords reason for believing that the management of the details of the business of the Establishment, in respect of the choice of stations or of the Vaccinators, may admit of considerable improvement. Dr. Gregory recommends the consolidation of some of the minor stations into two principal ones, one situated in the east, and the other in the west of London. As Vaccination is carried on in London by three separate Institutions, it is highly to be desired, in order to give the greater efficiency to their exertions, that they should so far act on the principle of co-operation as not to allow the stations of one Institution to interfere with the stations of another.

After making provision for the supply of Lymph, by appointing stations for Vaccination in London to be attended by salaried medical officers, the other essential point for which provision is required to be made, is the distribution of Lymph. To this end the Vaccinators are to prepare charges of Lymph; those charges are to be collected, and are to be numbered or registered, that in case of Vaccination not taking, or anomalous disease ensuing, it may be known what Vaccinator supplied the Lymph; the applications made for Lymph are to be complied with, and the charges are to be distributed to the applicants throughout the empire. It depends rather on the Government of the country, than on

the

the Vaccine Establishment or Institution, whether Lymph shall effectually be distributed. The privilege granted to the National Establishment of receiving letters applying for Lymph, and transmitting packets of Lymph post-free, is a privilege, it appears to the Committee, which ought to be extended to every Vaccine Institution in London, in order to promote the distribution of Lymph throughout every part of the empire.

From an examination of the minutes of the Managing Board of the National Vaccine Establishment, it appears that the business of the Establishment is confined almost entirely to carrying into execution those two points, which the Committee have stated they consider essential; the securing a supply of Lymph, and the distributing of it.

Other duties than seeing to the observance of these two points were formerly devolved on the Managing Board. The investigation of all doubtful cases was to be referred to this Board. Two doubts had been expressed and rendered current by the objectors to the new practice. Was vaccination a preventive of Small-pox? Did not vaccination give rise to a new class of inflammatory or eruptive disorders? Dr. Jenner had given undue advantage to the first class of objectors, by claiming more for the discovery than it has since been found entitled to. He had announced it, not as an almost certain, but as an infallible preventive of Small-pox. The fate of the new practice was thus made to hang on the occurrence of a single case of Small-pox after Vaccination. Real or reputed cases of the kind did occur; investigations were required of the Board, Reports on which were to be drawn up and laid before Parliament. Subsequent experience having shown that the occurrence of Small-pox, in a modified form, after Vaccination is not unfrequent, the pretension to perfect immunity from Small-pox has been abandoned, a high degree of probability has taken the place of certainty, and the necessity of investigating every case of the kind has disappeared.

The other class of objectors are no longer heard of. Inflammation rarely follows the puncture; and other eruptive disorders are occasionally cotemporaneous with Small-pox. It may be well when such cases occur, to render them public, as a caution to the Vaccinator who provides the Lymph; but they do not appear to require any special investigation by the Managing Board.

The practice of the Managing Board, during the last five years, confirms the view taken by the Committee, that investigations by the Board of the nature adverted to are no longer necessary. Mr. Simpson, the Inspector, states that very few anomalous cases have been reported to him by the Stationary Vaccinators during the last five years, and that these were of so mild a nature that he did not formally report them to the Board. On the Minutes of the Board, during the same period, only two entries appear in which the Inspector or Registrar were directed to visit or inquire into the case of any patient labouring under reputed Small-pox after Vaccination, or suffering from any eruptive disorder while undergoing Vaccination. 27 July 1829. 2 January 1832.

Another duty, which at the time of its establishment it was proposed to devolve on the Board, was that of establishing an improved method of operating in Vaccination. Besides circulating printed directions how to vaccinate according to the plan generally in use, the Board make no endeavour to establish such uniformity. The Vaccinators of the Establishment state that they are not specially instructed how to vaccinate, nor indeed do such instructions appear to be necessary, since all the modes of operating, though differing considerably in the detail, appear in the result to be almost equally successful.

From an examination of the minutes of the Board, and a consideration of the evidence, it appears therefore to the Committee, that, except the making an annual Report to Parliament, no other duties of importance now belong to the Board than to superintend the officers of the executive branch of the Establishment who are employed in supplying and distributing Lymph. But since the labour of watching over the supply of Lymph, and its distribution, now attaches to the Inspector, and that of conducting the correspondence, to the Registrar, the Committee consider the sacrifice of time and attention required of the Members of the Managing Board in superintending the executive department of the Establishment to be so slight, that the office of Member of the Board may be considered rather honorary than burthensome.

Great importance is attached by some of the witnesses to the moral influence, and weight and authority which, it is supposed, a Managing Board, composed of eminent medical men, will have in removing prejudices from the mind of the public against Vaccination, and in rendering medical practitioners zealous to promote the practice. Other witnesses attach no importance to the supposed influence of such a Board, and think that whatever confidence is reposed in the Board depends mainly on its connection with Government. Looking to the demand which there is for Lymph, and to the support, arising out of that demand, which is given to the London Vaccine Institution, the Committee are led to believe that the prejudices against Vaccination are greatly on the decrease throughout the country, and that the authority of the Managing Board is not necessary to enable Vaccination to withstand these prejudices; but since, according to the plan which they intend to recommend, a Managing Board will not be attended with expense, they do not propose altogether to abolish it.

From the organization and system which are requisite to provide a supply of Lymph and to distribute it, it is manifest that, in order to maintain the practice of Vaccination, either the co-operation of individuals formed into a society or the direct support of Government is necessary. From the correspondence which took place between the Treasury and the Managing Board of the National Establishment in the year 1831, it appears that Government had it at that time in contemplation to withdraw the Annual Grant of Money voted by Parliament, and to leave Vaccination to be sustained by Societies, depending for their support on private contributions. The want of stability in such Institutions is the principal reason assigned for not confiding the guardianship of Vaccination to such hands. One Vaccine Society, it is said, has been dissolved for want of funds; another, owing to dissensions among the subscribers; a similar fate is predicted to all future Vaccine Institutions; the possession is too valuable to be subjected to such risk. To these arguments it is replied, that former Vaccine Institutions ceased to flourish, because Government became the stay on which Vaccination rested for support; that in spite of this great disadvantage, Vaccine Institutions are still supported by the Public; that should Government cease to maintain the National Establishment, medical men and the Public would immediately unite to preserve the Vaccine Disease, as a possession too valuable to be lost; and in that case, even should the Public not lend its assistance, (as, from charitable motives, it probably would,) medical men would incur the cost of preserving this specific, as they would that of procuring any drug.

Several plans for maintaining Vaccination have been suggested to the Committee by Dr. Gregory, Dr. Locock, Dr. Epps, and Dr. Webster; and among other plans, the Committee beg to notice that submitted by Mr. Keate

Mr. Keate to the Home Office on the part of the College of Surgeons, who, in the event of the discontinuance of the Vaccine Board, proposed undertaking the superintendence of Vaccination gratuitously, if Government would continue to pay the Stationary Vaccinators.

In the plan which the Committee are prepared to recommend, they do not propose at once to break up the whole of the National Establishment, which they think might be attended with injurious effects. They find it stated in evidence, that if the privilege were accorded to the Hospital at King's Cross and to the London Vaccine Institution of transmitting Lymph post-free, that privilege, without any other support from Government, would be adequate to give prosperity and permanence to those Institutions, and to insure the maintenance of the Vaccine Disease in London. If this privilege be granted, and should be followed by those favourable results which are anticipated, it may be thought prudent at some future period to make some further reduction in the National Establishment.

The Committee beg now to recommend,

That the Board for superintending Vaccination should consist in future of Two Physicians and One Surgeon; that all Physicians and Surgeons should be eligible respectively as Members of the Board; and that the Members should be appointed by the Secretary of State for the Home Department, to hold their offices during pleasure.

That considering that the duties of this Board are likely to be rather honorary than burthensome, the persons to be appointed Members of the Board should before appointment be requested to signify their consent to perform the duties gratuitously.

That some of the Regulations of the present Board should undergo revision *; and that all future Regulations of the Board respecting the supply of Lymph to applicants, and the qualifications required of persons to be elected Corresponding, Extraordinary, or Stationary Vaccinators, should, before final adoption by the Board, be submitted for approbation to the said Secretary of State.

That the Board should have power to appoint an Inspector, whose duty it should be to superintend the Vaccinators and to attend to the distribution of Lymph; and a Registrar, whose duty it should be to conduct the correspondence, and in case of the Inspector's illness or absence to officiate in his place; that such appointments by the Board should be subject to the approbation of the said Secretary of State; and that the salary of each of the said officers of the Board should be 200 *l.* a year.

That the appointing of the Stationary Vaccinators, the fixing of their salaries, and of the number and locality of the stations, should rest with

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* Minute of the National Vaccine Board, November 22, 1810:

"That none but Professional Men be supplied with Lymph unless the Board shall think proper to dispense with this Regulation."

Minute of the National Vaccine Board, December 5, 1831:

"A letter was read from Mr. ——, of ——, stating that he had established a Vaccine Institution, and had Vaccinated many children in the Forest of Dean; still he felt unable to keep up the supply, and requested fresh Lymph. He also solicited the appointment of Corresponding Vaccinator, but not being a Member of the College of Surgeons, he was not nominated."

with the said Board, subject to the approbation of the said Secretary of State.

That the following sums, appearing adequate, should be allowed to meet the charge of the remainder of the proposed Establishment: viz.

Rent of office - - -	£. 100
Messenger - - - -	55
Miscellaneous expenditure -	150

That, looking to the great disproportion which has for a long time prevailed between the numbers Vaccinated at the different Metropolitan stations, it should engage the attention of the Board whether the number and locality of the stations may not advantageously admit of some alteration.

That, in order to give some countenance to the other Metropolitan Institutions which are engaged in promoting Vaccination, as well the Hospital at King's Cross and the London Vaccine Institution, as the National Establishment, should be allowed the privilege, under proper regulations and restrictions, of receiving letters applying for Lymph and of transmitting Lymph post-free.

The expense of the National Establishment, according to the plan recommended by the Committee, will be as follows:

Inspector - - - -	£. 200	
Registrar - - - -	200	
Messenger - - - -	55	
Allowance for office - -	100	
Incidental expenses - -	150	
		705
Stationary Vaccinators, but which will probably admit of further reduction -	- -	900
		£. 1,605

28 *August* 1833.

MINUTES OF EVIDENCE.

LIST OF WITNESSES.

Lunæ, 18° die Martii, 1833:

Sir Henry Halford, Bart. - - - - - - - p. 1
Clement Hue, M.D. - - - - - - - - p. 14
John Treadwell Simpson, Esq. - - - - - - - p. 23
Charles Murray, Esq. - - - - - - - - p. 25

Mercurii, 20° die Martii, 1833:

John Painter Vincent, Esq. - - - - - - - p. 31
Robert Keate, Esq. - - - - - - - - - p. 40
Dr. Thomas Hume - - - - - - - - - p. 43
J. C. Carpue, Esq. - - - - - - - - - p. 46

Veneris, 22° die Martii, 1833:

Dr. George Gregory - - - - - - - - - p. 52

Mercurii, 27° die Martii, 1833:

Dr. George Gregory - - - - - - - - - p. 64
William Lowe Wheeler, Esq. - - - - - - - p. 73
James Clift, Esq. - - - - - - - - - p. 77
Dr. John Epps - - - - - - - - - p. 78
Andrew Johnson, Esq. - - - - - - - - p. 89

Veneris, 29° die Martii, 1833;

Charles Murray, Esq. - - - - - - - - p. 91
John Webster, M.D. - - - - - - - - p. 91
John Treadwell Simpson, Esq. - - - - - - - p. 98
Mr. Abraham Beaumont, *Mr. Edward Baker* - - - - - - - - p. 99

Martis, 23° die Aprilis, 1833:

Mr. Richard Robertson - - - - - - - - p. 102
Dr. Charles Locock - - - - - - - - p. 105
Mr. Peregrine Fernandez - - - - - - - - p. 109
Mr. William Henry Cooke - - - - - - - p. 110
Mr. John Ford - - - - - - - - - p. 111

Jovis, 25° die Aprilis, 1833:

James Carrick Moore, Esq. - - - - - - - p. 113
Dr. Clement Hue - - - - - - - - - p. 127

Jovis, 9° die Maii, 1833:

Dr. George Gregory - - - - - - - - - p. 129

MINUTES OF EVIDENCE.

Lunæ, 18° *die Martii*, 1833.

HENRY WARBURTON, ESQ. IN THE CHAIR.

Sir *Henry Halford*, Bart. called in; and Examined.

Sir *Henry Halford*, Bart.

18 March 1833.

1. YOU are President of the College of Physicians, and also President of the Vaccine Board?—Yes, I am.

2. Will you state for what purposes the Vaccine Board was originally appointed?—The Vaccine Board was originally appointed to superintend the effect of vaccination over the whole kingdom, to encourage its adoption in place of inoculation, and to send out instructions, such as appeared to the Board to be necessary, to the various practitioners over the country.

3. Do you conceive the true objects for which it was appointed to have been to keep up a perpetual supply of lymph, and secondly to investigate anomalous and doubtful cases?—I consider to investigate doubtful cases was absolutely necessary in the first instance; to collect a never-failing supply of vaccine lymph is another object, of which time and experience has proved the necessity since.

4. From what was stated by Mr. Rose, at the time of proposing the first grant to Parliament, it should appear that the principal object at that time contemplated was to examine doubtful cases?—Perhaps so.

5. From experience at that time not having fully established the prophylaetic nature of the disease, against small-pox, as it now has?—Yes.

6. What are the present duties of the Board?—The present duties of the Board are to investigate such cases as are reported to them of doubtful efficacy; to send out instructions to practitioners in every part of the kingdom, as improvements suggest themselves; and to furnish matter instantly upon application for it, under the circumstances of small-pox breaking out, or any other good reason for which it may be required.

7. How often does the Board meet for business?—During the sitting of Parliament, every week, but never less frequently than once in a fortnight, and it is liable to be called together upon any occasion by the resident inspector of the vaccinators.

8. Are the names of those who attend entered in a minute-book?—Yes.

9. Is the business transacted every day of meeting entered in a minute-book?—I believe it is.

[Dr. *Clement Hue produced the minute-books of the Board.*]

10. What does the business of the Board, on its ordinary days of meeting, consist of?—Receiving letters from correspondents, directing such answers as are proper to those correspondents, and detailing the occurrences which have taken place since the last meeting; nominating also other corresponding vaccinators in various quarters, and electing trust-worthy persons for that purpose.

11. It is stated in a Return to Parliament, that you receive the reports which the Registrar makes of the correspondence of the Board, and give directions to the inspector to investigate all anomalous cases?—That is part of the ordinary business of the Board, but there is more than this; sometimes reports come from the country that the matter sent out has not been effectual; a record is kept of the source from whence that matter was supplied, which of the vaccinators furnished it, and that vaccinator is desired to explain such reasons as he has to give, why it is probable it has not been successful; this is a considerable inquiry, and very frequently takes some time.

Sir *Henry Halford*, Bart.

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12. All these daily transactions are entered in the minute-books of the Board?—Yes.

13. And the Committee will form a full estimate of what the details of the business are, by an examination of the minute-book?—Probably they will.

14. Is not the keeping up the supply of genuine lymph at present alleged by the Board as one of the most important objects for which the Board judges it advisable that Government should still continue to make a grant for supporting the Board? Undoubtedly.

15. Is not that now the great object, in your opinion?—I think it is.

16. Do you not think that the investigation of anomalous cases of disease, which in the earlier period of the disease it was of great importance to ascertain, in order to know whether the disease really was or not a preventive against small-pox, may now fairly be left to the activity of individual practitioners?—No, I do not think that it is without its use that there should still be a tribunal, to which it could be referred whether those cases are cases of small-pox after vaccination, or cases of any other disease.

17. Is there anything in the nature of the disease which the labours of the Board have been materially instrumental in bringing to light, for instance, as to its being really an entire preventive, or an imperfect preventive, against the small-pox?—I think an important article of the conduct of the Board is this; we have ascertained by our experience, that matter, to be perfectly efficacious, must be taken between the seventh and eighth day of the vaccine puncture; it *may* be effectual the sixth and the ninth day; but in order to have it perfect, it should be taken between the seventh and eighth day, and that is very important.

18. Do you mean to say that is a point that has been ascertained exclusively by the labours of the Board?—I think within the last year and a half it has been ascertained exclusively by this Board, from its large experience.

19. Was the accounts of spurious small-pox or chicken-pox, to a great extent, after vaccination, ascertained in the first instance by the National Board, or was there any other part of the kingdom where it was previously ascertained?—I am not aware that it was ascertained in the first instance by the Board, but it was a great object of inquiry on the part of the Board, and I believe they effectually made it; and I consider there is still a great deal to be done upon this subject. I am old enough to remember the frequent occurrence of the chicken-pox after the small-pox, and as I do not remember a single instance of a case of chicken-pox before the person had the small-pox, I have been less surprised to find cases of mild small-pox occur after vaccination. This is a matter the Board has had particularly in its eye, for some time past, to acertain whether chicken-pox has not followed small-pox in general, and therefore, whether there is not less reason to be surprised at cases of small-pox now occurring, in a light degree, after vaccination. I do not consider the subject is perfectly understood even yet.

20. What you mean is, that it is important a register should be kept by a Board, whether supported by public grant or not, of all the cases that come before it?—The Board has the experience now of 1,300,000 cases, and I know not how any private establishment, or any individual experience, could furnish the result of such an ample opportunity as that affords.

21. You mean that the history of all those 1,300,000 cases is preserved in the registers of the Board?—No; because, if there is nothing singular no record is made.

22. But where there is, it is investigated?—Yes.

23. You do not mean that these 1,300,000 have been vaccinated by stationary officers of the Board?—No; the number vaccinated this year has been 14,000; I do not think it has ever fallen short of 12,000, and this has continued four or five and twenty years, by our own individual vaccinators; but we have records from every person, (or ought to have, for that is enjoined them) of the result of their vaccination with the matter sent to them by this Board.

24. These 1,300,000 comprehend the records of those practitioners to whom you have sent lymph?—Yes, in addition to those of our vaccinators.

25. Which greatly out-numbers those whom you actually vaccinate?—Yes, in the proportion of 100,000 to 14,000.

26. Is there anything peculiar in the mode of vaccinating adopted by the vaccinators of the Board, or is it superior to that in common use?—Whatever improvements the vaccinators of the Board adopt, they are always communicated to our correspondents, and doubtless there have been many improvements made in the last 12 or 13 years.

27. But

27. But is the mode of vaccinating by the Board in accordance with the modes adopted by other contemporary institutions?—I do not know the practice of other contemporary institutions, we judge by our own experience, and the result of it.

28. You cannot say that the operation is not as well performed at other institutions, the object of which is to promote vaccination?—I would not undertake to say so upon any account; but I will tell, to the credit of our vaccinators, that the year before last, it was remarkable, no single instance of small-pox had occurred after vaccination, to any one of the vaccinators of the Board.

29. That is of those who were vaccinated in that year?—No.

30. Then explain within what period those persons were vaccinated who have not had small-pox consequent upon vaccination?—I cannot speak with accuracy to the time that had passed; but it was a remarkable circumstance, that not one of the vaccinators reported a case of small-pox after vaccination, within his own sphere.

31. Do you mean that that was the result of the practice of a series of years?—I believe so.

32. Do you know what number of cases it included?—No; but 12,000 were included in that year, and 12,000 each of the preceding years.

33. Was that the first time that such a report had ever been made to you of practice so successful?—It was the first time; it was marked and recorded, and it was given in to the House of Commons as a curious circumstance. I think some of the members of the Board who keep the book will speak to it with still more accuracy; but it made a great impression upon my mind.

34. Perhaps you could ascertain how many cases it comprehended, upon inquiry?—If the Committee take the average number of 11,000 or 12,000, it would give some presumption, for the last 10 or 12 years, of the number vaccinated by our vaccinators. I believe, upon the average, it was between 10,000 and 12,000. This year there are 14,000.

35. Is there anything peculiar or superior in the quality of the lymph that the Board furnishes?—We believe that it is very accurately taken, from the pains used to instruct their vaccinators to be careful.

36. Is it better in quality than the lymph furnished by other vaccine institutions?—Much depends upon the period when taken, and as the seventh or eighth day is the most effectual period, if they are careful to take it upon those days only, you are not surprised that they should be eminently successful. I know not by comparison, because I know not any other institution we can compare to it.

37. The Board at present consists of three physicians and one surgeon, and the registrar?—Two physicians and one surgeon, and the registrar, are the Board at present.

38. One of the censors of the College of Physicians is discontinued?—Yes; and the vice-president of the College of Surgeons.

39. This letter states that one censor is to be discontinued?—Yes; and there has been a discontinuance of another member of each of the Colleges of Surgeons and Physicians in the last year; the president of the College of Physicians and the president of the College of Surgeons, and the senior censor, make the Boards at present.

40. And the registrar?—Yes.

41. That is four?—Yes.

42. Have the members of the Board become practically acquainted with vaccination; have they made all the stages of the disease the special subject of their study?—I do not know; but if I was to be consulted upon a subject of that kind, I should consider myself competent to give an opinion; I do not know what credit that opinion might find.

43. Do the members of the Board see frequent cases of small-pox?—I have lived long enough as a physician to have attended a great number; it is not common now, but we meet with it occasionally; an ordinary physician does not now see it often. When I first became a physician in London, the cases of small-pox were frequent enough.

44. Do you not think it desirable that those who form the Board should be intimately acquainted with the appearances of small-pox?—Undoubtedly; and they are so.

45. Is it not desirable, for the purpose of keeping up the supply of genuine lymph, that the Board should be able to select it from a great number of cases?—Yes.

 46. And

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46. And with that view it is desirable to concentrate a great number of cases at every station for vaccination?—Certainly.

47. Does the multiplying the number of stations in London, at all interfere with that concentration of cases you consider desirable?—I think not. In the choice of the station for vaccination we have reference to the crowded part of the metropolis, where the poor will go.

48. Have any of the branch stations ever failed in keeping up their own supply of lymph, that you are aware of?—Wherever it has been the case, and it has been the case in two or three instances in my knowledge, the vaccinator has been discontinued, because he did not afford his quota; from some occurrence or other, people did not go to his station; it has been changed, and another vaccinator has been selected in a more crowded part.

49. Are the stationary vaccinators aware that if they fail to keep up at their own stations a supply of lymph, that they will be dismissed from their situations?—Certainly; because they have been dismissed.

50. That is the general rule?—Yes.

51. Are they informed at the time of their appointment that such will be the case?—Yes, they are repeatedly admonished upon the subject; for some time in the winter it is an object of the greatest difficulty to collect a sufficient quantity of an authentic nature, and it is the business of the inspector of vaccinators to go to that person and inquire into the reason, and admonish him, and tell him if he does not afford that supply he will be discontinued; he receives the orders of the Board for that purpose.

52. If they actually lose the supply of lymph at their own station, they are not very likely to inform the Board of it, since dismissal will be the consequence?—We know where every charge of lymph comes from, and if a person is backward in furnishing his quota, he is requested to be careful in future, and verbally reprimanded in that manner; but sometimes in the winter it is so difficult to keep it up, that the inspector of the vaccinators is obliged to ask one, or two, or three of them to furnish him with matter, and I believe it has never happened that where matter has been applied for, it has not been instantly furnished; and you will find in the books a great number of instances have occurred where it was absolutely necessary that they should be immediately answered, the demand was so urgent. The year before last, the fleet came in, and the small-pox broke out, and the surgeon sent up to the Vaccine Board for matter. Had he depended upon some casual acquaintance for a supply, he might not have got it; he gets the matter immediately by the messenger that comes for it, and he prevents those who have been exposed to the small-pox from suffering by it, by giving them a safe protecting disorder.

53. On a demand for lymph, each station is required to furnish a supply?—Yes.

54. In addition to the central station?—Yes; I do not know the quota that the central station supplies in comparison with others; there is one very meritorious vaccinator who vaccinates 3,000 in a year, and furnishes matter in proportion; we have generally a resource in going to him, if any others accidentally fail us.

55. Do you know whether any stationary vaccinators, on losing their supply of lymph, have ever made any application to some of the other vaccinating institutions for giving them a fresh supply?—I do not know it, and think it much more probable that they would seek it from some other stationary vaccinator.

56. From what source do the medical practitioners in the country principally obtain their supply?—In case of any difficulty in getting the lymph, and it is frequently that is the case, they send up to the Vaccine Board, and get it.

57. Do you mean that all the medical practioners in the country have recourse to the National Board only, and that many of them do not make application to other vaccine institutions in London?—I do not know other institutions to which they can apply; I know they vaccinate at the Small-pox Hospital, since the number of patients has been diminished, but I am not aware of any charitable institutions of the same kind in London. There was a man of the name of Walker who used to go about offering a diploma, and for which he received two guineas; persons gave him their two guineas, and they were enrolled in his vaccine institution, and he levied a great deal of money under those pretences, and what he did with the money he so presumed to raise I cannot say.

58. You are not aware of the existence of any other institutions in London to support vaccination, but that of the Small-pox Hospital?—I know that one or two of them have failed, and that our Board has adopted and paid their vaccinators; there

there was one in Broad-street, and it went on for a certain time, but it failed at last.

59. Do you know when that Broad-street Institution was first established, and how long it continued?—I think it continued some eight or ten or twelve years.

60. Are you aware it was continued nearly 26 years?—I am not aware of it, but it broke up at last.

61. Are you aware of the amount of subscriptions?—No.

62. Is it not one of the consequences of maintaining a vaccine institution by Government support, that it has a tendency to destroy and swallow up all the institutions maintained by public subscription?—I believe it is impossible to maintain it without the public support, and I am justified in that opinion by knowing that wherever dispensaries have attempted to accomplish this object, which our Board is accomplishing, they have failed, let the charity be as generous, and let the prudence with which it is administered, be as perfect as it may.

63. But generally, in regard to all charitable institutions, where Government undertakes to support them, is not one of the effects to diminish the subscriptions which individuals, if the public did not interfere, would be willing to advance in support of those institutions?—I do not believe they could do it; the experiment has been made so frequently and failed, that I do not believe it can be done.

64. Is not such the effect of the Government taking in hand any subject either of charity or of the nature of an hospital, that the advancing the money for its support out of the public purse has a tendency to diminish private contributions?—Generally speaking I would admit that as a principle, but I do not think it applies to this case.

65. Are you aware of the nature of the Broad-street Institution, that it was set on foot and maintained, so long as it lasted, by medical men, who wished to have under their own control an institution, for investigating fully the nature of the disease?—I believe the object was rather to be able to command a supply of lymph as their private practice might demand it, and if they had more at any time than they wanted, they sold it.

66. Are you aware that they were principally medical men that contributed in support of that institution?—Yes, and that I believe to be the object rather than that stated, that they might be able to command a resource whenever they wanted it for their private practice.

67. Are you aware that the institution was maintained for 26 years at an expense of 200 *l.* a year?—I am not aware of that. If the report made to Government last year, in answer to the question, What reasons could be given by the Board why Parliament should not withhold its grant? was read, a great deal of this matter would be explained.

68. Does the Board furnish a supply of lymph to all applicants for lymph, or do they confine the supply to medical practitioners?—No, they supply it to all applications.

69. Do they supply it to druggists as well as practitioners?—I cannot speak to that point; as the druggist would not be a person that could make use of it, I take for granted it might be denied him.

70. It would be denied to a druggist?—I cannot be sure that he might not be a practitioner at the same time.

71. If he is not a practitioner at the same time, is it the practice of the Board to refuse it to a druggist?—The registrar and inspector of vaccinators will answer that question much better than I could do; it is a general rule to supply it, wherever it is properly asked for.

72. What is meant by properly asked for?—The purpose being stated for which it is asked; for instance, a person will write from Manchester, and say, I cannot get any lymph in this neighbourhood, the small-pox has broken out, be so good as to send it; and there was never a case where it was not sent by return of post, and I am not speaking of those large towns only.

73. Will the cases of refusal appear entered in the minute-books, and the grounds of refusal?—That will be answered by Mr. Simpson.

74. (To Mr. *Simpson*.)—Will the cases where the supply of lymph upon application has been refused, appear in the minutes of the Board, and the grounds of refusal?—No, they will not; the applications are generally of such a nature that they have not been refused; there have been instances where druggists have been supplied with lymph, stating that they wanted it for practitioners in their neighbourhood, but very rarely.

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75. But is it the practice to refuse it to the demand of druggists or not?—Yes, certainly, unless they bring an application from a medical practitioner; for instance, if a great druggist in Oxford-street was to send to the establishment for a supply of vaccine lymph, stating he wanted to send it to Stanmore, it has been supplied to him; but it very rarely occurs we do it for druggists, not 10 times in a year.

76. The National Board has the privilege of sending supplies of lymph post-free to all parts of the kingdom?—They have.

77. That privilege is not given to any other vaccine institutions?—I believe not.

78. During how many days in the week, and during how many hours in each day, are the stations of the National Board open for vaccination?—At the principal station where I live vaccination is practised every day for an hour, and some of the other stations for an hour two days a week, and at others three days a week.

79. Since what time has the central station been opened every day in the week?—Ever since it was established, at least I found it so when I was appointed resident inspector.

80. What are the hours during which the central station is open?—From 10 to 11.

81. Where are the stations that are open three days in a week, and which are the stations open two days in a week?—Mr. Gillham's are open three days in a week.

82. Then as to those that are opened three days in the week, during what hours in the day are they open?—It varies; some of them in the morning, and at others later, from 10 to 11, or from 9 to 10; the station I recollect being open three days in the week is open from 1 to 3, he vaccines so many; he is there three or four hours a day.

83. The others that are open only once a week, what is the hour there?—From 9 to 10, or 10 to 11 generally.

84. What hour in the day is found most convenient for the attendance of the children of the poorer classes?—I should think any hour that did not interfere with their meals.

85. The interval being so short, namely, between the seventh and the eighth day, during which the lymph ought to be taken, is it not desirable that the stations should be open every day in the week for keeping up a full supply of lymph?—The supply would be greater if it was so.

86. Has it not been stated that during the winter season it is found extremely difficult to keep up a supply?—That would not have the effect of increasing the amount of vaccination; as many of them as apply are vaccinated in those two days; if they were to vaccinate every day, it is probable there would not be a greater number.

87. Would it not furnish an additional number of patients who would attend between the seventh and eighth day?—The days appointed, taken altogether, include every day in the week; some of them vaccinate on Mondays and Thursdays, and others on Tuesdays and Fridays, and others on Thursdays and Saturdays.

88. But, taking each individual station, would not each individual station be able to afford a much more general supply of lymph from the patients attending between the seventh and eighth day, if the stations were open every day in the week?—Probably it might be so.

89. If the great object of the National Board is to perpetuate the supply of lymph, would not such a regulation of enforcing attendance every day in the week be one of the most economical regulations that could be devised for keeping up the supply of lymph; would not the supply of lymph thereby be kept up with a smaller number of stations than it would if the attendance is only during two or three days in the week?—I do not think the number of applicants for vaccination would be greater at any of the stations if it was to be open every day in the week, they would probably not have more than on those two days.

90. Does not the supply of lymph depend upon the number of patients who attend between the seventh and eighth days?—Yes. (By Sir *Henry Halford.*) When they are vaccinated on the Monday they are told to come on the Monday following, and show their arms.

91. They always attend?—(By Mr. *Simpson.*) Not always; they are desired to attend that day week, or once between.

92. You do not believe that a larger number of patients would attend between the seventh and eighth day if the vaccine stations were open every day in the week?—I do

I do not think they would; those stations are all well established in their different neighbourhoods, and the people in that neighbourhood are aware of the day, and as many as wish for vaccination attend.

93. Would it not afford the means, in case of a sudden demand for lymph, of obtaining it with greater certainty upon any particular day, if the stations were open every day in the week?—There is one station, that I have stated before, that is open every day in the week, which affords a resource in case of necessity generally to the extent that is wanted.

94. Does not the demand come upon you to a greater extent occasionally than you are able to supply?—It never has done, except perhaps for a day or two.—(Sir *Henry Halford.*) And that very rarely, I believe.

95. (To Sir *Henry Halford.*) To what establishment did the Board refer, when in this letter to the Home Department of the 6th of December 1831, it stated "That all establishments originating in and supported by private subscriptions, had been found inefficient, and had sooner or later fallen and been abandoned"?—As far as I can recollect it was at Coventry, at Manchester, at Birmingham and Leicester, and some other places that were reported to us from time to time by our correspondents, as the reason of applying to us for lymph.

96. You referred then as well to provincial establishments as to establishments in London?—Yes.

97. What institutions for promoting vaccination were in existence in the year 1807, when the National Board was first established?—I do not remember any other but the Broad-street. This might have been in existence at that time, but I was not President of the College of Physicians at that time, and it did not fall in my way to know the matter so accurately as it has done since.

98. Was not the Royal Jennerian Society in existence at that time?—(Mr. *Murray.*) It was established in the year 1803, and it continued in tolerable activity till the beginning of 1807.

99. Was the deficiency of lymph a subject of complaint in 1807?—(By *Sir Henry Halford.*) I cannot tell.

100. Are any of the institutions which then existed, still in existence?—I am not aware of any one of them. (By Mr. *Simpson.*) I believe there is one; Dr. Walker's; he is dead, but it has been continued by some one since.

101. Was the London Vaccine Institution at that time in existence?—I do not know.

102. Can you say then what institutions besides the National Board exist at present in London for promoting vaccination?—I know no one that publishes its transactions, and therefore makes its services generally known, but the Small-pox Hospital.

103. Are you not aware there is a London Vaccine Institution?—I am not aware of it from any publication, or that we know anything of its proceedings.

104. 1823, here is the 25th annual report. (*It was handed to Sir Henry Halford.*) Does the Board correspond on the subject of vaccination with either the Small-pox Hospital or the London Vaccine Institution?—No, there is no regular communication; there may be some accidental communication occasionally.

105. Have those institutions been found inefficient for their purpose, and in what respect?—I cannot tell; I believe the Small-pox Hospital does good to a certain degree; they have published a report, by which it appears they have vaccinated 3,000 this year. I give them credit as far as it goes, but it does not amount to the number vaccinated by one of our vaccinators. As far as it goes, I have no doubt it was done very creditably and properly.

106. You are vice-president of the Small-pox Hospital?—No, I am a governor.

107. Does that institution, the Small-pox Hospital, depend upon the patients itself vaccinates, to keep up its own supply of lymph?—I cannot tell; it is maintained by subscription.

108. Are you not aware that it has an independent fund and income of nearly 800 *l.* a year, derived from money vested in the funds?—I was not aware exactly what the sum was. As a life governor, I paid down a sum of money, and this, with the subscriptions of other life governors, may have been invested.

109. Why do you think that a national establishment alone is capable of supplying an adequate quantity of lymph?—Because we find that 12 vaccinating stations, in the most crowded and eligible parts of the metropolis, are but just equal to furnish a supply to meet all the applications to the Board; and it has been repre-

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sented to us, from various private establishments in the country, that they cannot keep up a supply of lymph.

110. But confining your attention to those institutions which existed in London, are you able to say whether or not, from their own resources, they are able to keep up a supply of lymph?—I should think not; but I really cannot pretend to say that I am acquainted enough with their resources; but I know that we supply the army, the navy, and the colonies, and it requires an enormous supply, such an one as is only to be obtained by a fixed establishment.

111. What portion of the income which the National Board receives from Government, is applied in payment of salaries?—The salaries are recorded there.

112. The income at present received from Government is 2,200 *l.* a year?—I think 2,300 *l.*; originally 3,000 *l.*; then it was 2,700 *l.*, and then 2,500 *l.*

113. From 3,000 *l.* it was reduced to 2,500 *l.*, and in 1832 it was reduced from 2,500 *l.* to 2,200 *l.*?—I believe it is so.

114. The income that the National Board now receives is 2,200 *l.*; will you state what portion of the income is applied in the way of salaries; first, to the Board; secondly, to the officers of the institution; thirdly, to the stationary vaccinators, at present?—The staff of the Board receive 827 *l.*; the vaccinators receive 950 *l.*

115. Then the Board expends out of the 2,200 *l.* it receives from Government, in salaries to the officers of the Board and to the stationary vaccinators 1,777 *l.*?—Yes, I take for granted it is so.

116. Leaving 423 *l.*?—Yes.

117. What rent is paid for the house of the central station?—(Mr. *Simpson.*) One hundred and thirty pounds a year.

118. Is a house provided at any of the branch stations?—Not a house, I believe; there is one vaccinator who has an allowance of 10 *l.* a year for a room to vaccinate in.

119. So that 140 *l.* a year is for house rent?—Yes.

120. Then the current and contingent expenses of the Board are reduced to 283 *l.*?—(Sir *Henry Halford.*) Yes, I suppose that is so.

121. If the Government thought it adviseable to reduce the expenses of the Board, what portion of the present establishment might be reduced, so as least to impair the efficiency of the Board?—That has been taken into consideration from time to time, and I am not aware that it is capable of being reduced further; if it were reduced further, it would lessen its efficacy. It has been repeatedly examined, with a view to establish another vaccinator or two out of the present grant. As the metropolis is increasing, it is very desirable there should be two more vaccinators within the control of the Board.

122. Do you not think that one medical officer, placed at the head of the institution, devoting his time to it, would be capable of managing it?—Where could you find a medical officer of that consequence that the public would have confidence in, to devote his time to this institution alone? where could you find a person whose authority would carry any weight with the public, to do it for a smaller proportion of the grant than is now paid to the president and senior censor of the College of Physicians, and the president of the College of Surgeons?

123. At the first institution of the Board, while it was still doubtful whether vaccination was really the protective which it professed to be, a Board carrying great weight with it might be of the first-rate importance; but at present, when these doubts, in the minds of all reasonable men, are removed, is it so necessary that a Board carrying great authority with it should remain to superintend the concerns of the establishment?—I believe it is; because notwithstanding it should appear to men of education and sense to be infinitely preferable to vaccinate, yet there still exists a prejudice against it among the poor people; so that the mortality by small-pox, even now, amounts to 700 lives a year within the bills of mortality.

124. Do you not think that this danger might attend the total extirpation of small-pox, that people would become fool-hardy and neglect even to vaccinate, and that in consequence when small-pox did appear, it might occasion much greater ravages than it does at present, when it spreads only to a limited extent, in consequence of persons taking the precaution of vaccinating?—Wherever vaccination has been enjoined by the laws of the country, it has extirpated small-pox in those countries; but here, where we take the privilege of dying in our own way, people will

will continue to go unvaccinated, and subject themselves thereby to be swept off on the invasion of small-pox. The average number of lives lost before vaccination was discovered, in the metropolis alone, was from 4,500 to 5,000 a year; since that time the average mortality in the same space is about 700 a year; but this shows the necessity still for recommending, at least, by the authority of Parliament, the practice of vaccination.

125. Can you state what is the per-centage upon the whole number of deaths from the small-pox during the last 30 years, as compared with the per-centage upon the total number of deaths within the bills of mortality up to 1800?—No, I have not that in my mind at the moment.—(Mr. *Simpson.*) Here is a paper I have drawn out upon the subject.

126. Will you explain what is the reason that the stationary vaccinators appear to receive very unequal salaries; there are two who receive 150 *l.*, two receive 100 *l.* a year, and the others receive only 50 *l.* a year?—(Sir *Henry Halford.*) All of them received more in the first instance, but since the Board has been called upon to reduce the establishment as low as it is possible to be reduced, they have considered the different claims and the different services of the vaccinators whom they employ; Mr. Gillham has 150 *l.* a year, and Mr. Gillham vaccinates 3,000 persons, and he will furnish you with eight charges of lymph for every person, and there are therefore 24,000 charges of lymph produced by that person to the general depot annually.—(Mr. *Simpson.*) Mr. Carpue vaccinates every day in the week.

127. He is the vaccinator at the central station?—Yes.

128. Does Mr. Gillham vaccinate every day?—No.

129. Why does he receive the same salary as Mr. Carpue?—He vaccinates a much larger number; his attendance is from one to three, but he is generally employed three or four hours a day.

130. Though he is actually required to attend two hours, he does really attend three hours?—Yes, or four.

131. Does not it appear to you that 150 *l.* a year for attending two hours a day three times a week, is a greater sum than the duty could be performed for?—He very frequently vaccinates 100 in a day, or 80 or 90.

132. Mr. Aikin and Mr. Leese, who each receive 100 *l.* a year, why is it they receive more than the others whose salary is 50 *l.*?—(Mr. *Simpson.*) I believe it is from their having been on the original establishment, coming from the Jennerian Society; they are both of them most efficient vaccinators.

133. Have you ever considered, if it was thought proper to dissolve the Board, whether by a moderate salary afforded to the parish apothecaries in London, a complete supply of lymph might not be kept up?—(Sir *Henry Halford.*) I believe it could not; I believe the advantage of this discovery, and I consider it a most important one, would be lost in the course of seven years if it were not maintained by all the authority and all the zeal which can be taken by a public Board, reporting its proceedings to Parliament every year. What check would you then have upon those parish apothecaries that they did their duty? It is necessary there should be a check upon the disbursement of this money, by the report to Parliament of the expenditure.

134. Since the druggists are not able to obtain a supply of lymph from the National Board, whence is it that they obtain their supply?—The druggists are applied to on behalf of their correspondents, practitioners in the country.

135. Whence is it they obtain their supply, presuming from a former answer given upon the subject, that, with occasional exceptions, the general rule at the Board is to refuse a supply to druggists; whence is it the druggists obtain the supply which they want for their country employers?—I take it for granted that their answer back to the correspondent is, you must apply yourself to the Board, and there you will get it.

136. You do not believe there are any regular sources of supply from which, whenever they require it, they obtain it?—I believe there is no regular supply but from this National Institution, that affords a supply that they can depend upon.

137. What are the difficulties and labours which in the letter to the Home Department from the Board of the 5th of December 1831, are referred to, and which it is stated that the Board underwent in organizing the system for diffusing vaccination?—It has been the result of considerable experience to determine how

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you shall station those people, and upon what terms they shall be stationed, how they shall correspond with you, and how they shall receive your instructions from time to time; those are the points to which I suppose allusion was made.

138. Did not the system, in a great measure, from the demand there was for lymph, organize itself?—I can only say that the present system has been the result of experience. I do not know whether the Committee is aware that every person who receives lymph, receives directions to transmit an account of the result of the use of it, to let us know whether it is effectual or not, so that when applications have been made for lymph, with it are communicated to that person the best mode of using it, and a request that he will tell us the effect of it, and if it should not have been efficacious, an inquiry is immediately made of the person who has furnished it how it came to fail. The letter states this has been done by appointing in every town in this kingdom, and almost in every other part of the world, intelligent and well-educated practitioners, who by constant intercourse and correspondence with the Board, have communicated and received valuable information, and have ever found in the central station an unfailing supply of vaccine lymph.

139. What appointment does the Board make of practitioners in every town in this kingdom?—This is the nature of it: a person writes up, and says, I shall be very glad to be acknowledged as a corresponding member of your Board; I have been able to do such and such services in regard to vaccinations; I live in a neighbourhood crowded, and I should be glad to have your sanction. That induces the Board to look and see if he is an authorized practitioner, either by the Society of Apothecaries or the College of Surgeons, and if he be so, we proceed to elect him.

140. Suppose there are four or five applicants, members of the College of Surgeons, and of the Apothecaries Company, all residing in the same town, you would appoint them all if they applied to you for lymph, and transmitted to you accounts of the application of it?—Probably we should, in order to distinguish those who deserved the public confidence, from such as had not a sufficient pretension to credit.

141. Is it the practice of the Board to appoint, in the way you mention, any number of practitioners, carrying on business in the same town?—We take it for granted, if he is a member of the Royal College of Surgeons, or authorized by the Society of Apothecaries, he is a respectable person, and we proceed to elect him.

142. Those appointments arise out of the individual applications of the parties, and not out of any previous exertions made by the Board to spread vaccination?—No; but this person conceives he has a degree of weight given to him as an authorized vaccinator, if he is appointed by the Board, and the people will apply to him with confidence.

143. But still, admitting the propriety of the appointment, the appointment arises, not out of any previous inquiry by the Board into what are the means of vaccination in that town, but out of the application of the practitioner, in the first instance?—Yes; in nine cases out of ten; sometimes we name a new situation where a vaccinator should be appointed, with whom we should correspond, and it is his duty to correspond with us.

144. Now with regard to the appointments in almost every other part of the world, in what other parts of the world are those appointments made?—In the West Indies, in the American Colonies and the East Indies.

145. In short, all persons who apply to you for lymph, and are willing to correspond with you, and give you information how that lymph has been applied, are the persons whom you describe in this letter as appointed vaccinators in various parts of the world, provided they be authorized practitioners by the College of Surgeons or the Society of Apothecaries?—Yes; and by those means we get a communication of what is going on upon the subject, in all quarters of the world.

146. It appears that this correspondence is carried on at the very trifling expense, exclusive of house-rent and salaries to the Board and the London Vaccinators, of 283 *l.*?—Yes; as it comes postage-free I am not surprised at it; it is the stationery, and the instruments by which the matter is sent out, which occasions the expense.

147. Therefore, supposing that the staff of any other institution could be maintained by any means independently of support from Government, the correspondence, at home and abroad, might be carried on for an expense of about 300 *l.* if the Government would yield it the same facilities in transmitting lymph postage-free as they now afford to the London National Vaccine Institution?—Yes; but where still is the responsibility?

148. On

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148. On what data is the calculation founded, contained in the report of the Board of the 21st of January 1833, wherein it says, "that the means of giving the protective process have been distributed by us to more than 100,000 persons, in various parts of the world"?—That is the number of points that have been sent out by the Board, to applications made to it this year.

149. It means there have been 100,000 transmissions of lymph?—Positively.

150. These are transmissions of lymph?—Yes; 100,000 transmissions of lymph have been made in the last year from the Vaccine Board.—(Mr. *Simpson.*) 100,000 charges of lymph?

151. This will appear by the records of the Institution?—Yes.

[Mr. *Simpson produced a book showing the total number of charges sent out.*]

152. Can you state by looking at that book the number of applications that have been made from any public department in this country during the last year?—221, during the last five years, from the Navy, and 303 from the Army.

153. What number of applications have been made to you for lymph, and answered, by any of the British Colonies and Dependencies, and Foreign Governments, during the last five years?—A return to that effect can be made to this Committee. *See* Appendix.

154. You stated in this letter of December 1831, that the demands for lymph are incessant?—Yes.

155. (To Sir *Henry Halford.*) Does not this great demand prove, that if the Government were to withhold its support, private institutions would be supported for supplying this demand?—It is just possible; and at the end of that report there is stated, what appears to the Board to be the best mode of proceeding in case Parliament should think fit to dissolve it; it is recommended to encourage private subscriptions in every parish, and to let vaccination take place at stated periods of the year; and that a report of the success of it should be made to the College of Physicians and College of Surgeons.

156. You have stated that attention is required that no lymph should be sent but what is genuine?—Yes.

157. This only shows that some institution is necessary for concentrating all the labours of the different vaccinators, but it does not show that a National Board alone could effect that object?—I think you cannot depend upon private charity, as I have stated, from the experience we have had of them in Coventry and Birmingham; they say that, notwithstanding those institutions, we shall be obliged to you to send us some matter.

158. Are you aware that a great number of practitioners subscribe to one or other of the institutions which are supported by private subscriptions in London, for the purpose of obtaining from them the lymph that they require?—I am not aware of it, nor do I give very easy credit to it; I should beg to know upon what authority it is so stated.

159. Do you not think there is a general conviction among all the practitioners in this country that vaccination is a great boon, and ought to be kept up?—Certainly.

160. Do you know the total number of medical practitioners in England and Wales?—No.

161. Are you aware it is near 10,000?—I never heard the number stated.

162. Do you think, if it was stated to the medical practitioners in England and Wales, that Government was about to withdraw the grant it has hitherto given in support of vaccination, that those practitioners would not, if there was any danger of dissolving the vaccine institutions which exist in London, come forward for the purpose of perpetuating a supply of lymph?—If they did, I do not believe that they could succeed in accomplishing it.

163. Why could not another Board, having the same income as the present Vaccine Board, keep up the supply of lymph as well as the present Vaccine Board does?—It is now so notorious on the Continent that there is here a fountain which may be depended upon to supply authentic lymph, that they come to us, where they would not depend in the same manner upon a private institution, and I believe a private institution would not be able to do it unless they could command the services of some 14 or 15 vaccinators, whose duty it would be to supply the lymph.

164. If they raised an adequate sum for the purpose, do you not think they could command those vaccinators?—That would apply to some large towns, but not over the country at large.

165. I am

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165. I am supposing that such a private Board is established in London; do you not think, if the practitioners in the country found they were cut off from a supply from the Vaccine Board, that they would have recourse to other Boards, supported by private subscriptions?—I think it would be so much an experiment that a Government would be hardy to attempt it.

166. You do not know that such an experiment is going on, by the existence of an establishment in this town, to which country practitioners subscribe, and from which they obtain their lymph?—I do not believe it.

167. There is another public Board for vaccination existing in Dublin?—There was; and I think we have had applications from them, because they cannot constantly supply it; I know from Cork there have been applications made to us, because they cannot get it from Dublin.

168. You are aware that the Dublin Vaccine Institution, though it receives a large grant from Government, has occasionally lost its supply of lymph?—I believe so.*

169. Are you able to produce any letter authenticating that statement?—(Mr. *Simpson.*) Here is a statement of the number of applications from Ireland within the five years which I named.

170. Those are applications from individual practitioners?—Many of them from dispensaries and hospitals.

171. Are any of those applications from the Dublin Vaccine Board?—I am not aware of it.

172. You now hand in a return of the number of applications made to you from medical practitioners and dispensaries in Ireland for lymph, during the last five years?—Yes.

173. Amounting to 578?—Yes; and it has increased in the last two years.

174. You think that the system now pursued by the Board in London to keep up a supply of lymph is a good one?—(Sir *Henry Halford.*) I do.

175. If any other society was established for the same purposes, the course you would recommend it to pursue would be very much that now followed by the Board?—Certainly; but it should be made responsible to Parliament.

176. Has the Board adopted the course it recommends to be followed in the case of Government withdrawing its support entirely; has it applied for private subscriptions in every parish throughout the kingdom expressly for the purpose of remunerating practitioners for vaccinating the poor without expense, in two given months in every year?—That is an expedient that has been stated in case this Board shall be dissolved; if Government think proper to dissolve it, the most plausible and rational mode of proceeding, and protecting the public against the great loss of life by small-pox, would be by raising subscriptions in every parish, to remunerate practitioners that will not do it without remuneration.

177. Suppose it should appear that the demand for lymph which there is from practitioners in the country could enable an institution to realize an income to the same amount that the Vaccine Board now receives from the public, do you not think that the best course for that new institution to pursue, would be very much the same course that the Vaccine Board now pursues?—I think nothing less would do.

178. Does it remunerate practitioners throughout the kingdom for vaccinating the poor without expense, for two given months in the year?—It puts it in their power, if they think proper; but it has no right to demand that they shall give up their time.

179. But still this course that the Board recommends to be pursued in case of the present Vaccine Board being dissolved, is not the course which the Vaccine Board actually follows?—The Vaccine Board cannot undertake in every parish in the kingdom to collect subscriptions to reward practitioners.

180. Why should you advise another contemplated institution to pursue that course which the Vaccine Board does not now pursue?—It is a distinct duty; if the Government chuse to dissolve this Board, the Vaccine Board recommend this mode of proceeding to be adopted as a resource.

181. The principal thing which the Vaccine Board now does, is to see that the supply of lymph is kept up?—Yes.

182. It transmits that lymph to all applicants in town and country, and it endeavours to obtain from those persons an account of the result of their practice with regard to it?—Yes.

183. If

* No grant is made by Government to this Institution.

[*To be placed facing page* 12 *of the* EVIDENCE *on the* VACCINE BOARD.]

THE note at the bottom of the adjoining page, which states that no grant of public money is made to the Dublin Vaccine Institution, is in error; for the following sums appear in the Irish Civil Contingencies, commencing with the year 1828; and from the explanation appended to the grant of that year, it is plain that grants had been made in former years, though they are not entered in the Estimates for Civil Contingencies. The error arose from there being no separate reference to this particular grant in the Index to the Sessional Papers.

Extracted from the Estimates for Irish Civil Contingencies.

	£.	*s.*	*d.*
Estimate of 1828—Dr. H. Ferguson, Secretary to the Cow-pock Institution, the usual annual grant - - - - - - -	150	–	–
— 1829—Dr. H. Ferguson, Secretary to the Cow-pock Institution, deduct 11 *l.* 10 *s.* 9 *d.* overpaid last year - - -	126	18	6
— 1830—The Cow-pock Institution - - - - - - -	200	–	–
— 1831— Ditto - - - - - - - - - -	200	–	–
— 1832— Ditto - - - - - - - - - -	200	–	–
— 1833— Ditto - - - - - - - - - -	200	–	–

183. If private institutions can be formed, with adequate resources, would not the course pursued by the Vaccine Board be precisely that you would recommend the new institution to follow?—Yes, certainly; but there will always be wanting that responsibility in a private establishment, which keeps this institution in force and in order.

184. And therefore the real difficulty is, whether a permanent income can be obtained for doing that which the Vaccine Board now does with Government money?—Yes; and if there was the least uncertainty in the matter from this irresponsibility, the mortality would in all probability be frightful.

185. Does the lymph lose in efficacy by being carried to a distance?—Where it is sent to a distance, particularly to a hot climate, it is sent in tubes that are hermetically sealed.

186. Is it sent in glass tubes generally hermetically sealed?—When it is going to a hot climate it is sent in that form.—(Mr. *Simpson.*) It is generally sent upon ivory points, placed between two small squares of glass.

187. Have there been many complaints in this country of the failure of lymph transmitted by the Vaccine Board?—Yes, occasionally.

188. Do you keep in such cases a register of the vaccinator from whom that unsuccessful lymph was transmitted?—Yes.

189. Have the Board ever thought of establishing provincial institutions in any of the larger towns in this country?—They have encouraged it; they never send out matter that they do not earnestly recommend to that person to keep up his own supply.

190. They have never thought of appropriating any of the income they receive, by paying a practitioner in any large town in the country for doing the same duty that is performed by the stationary vaccinators?—No; they have never thought they had it in their power to disburse any of their funds in that way.

191. Could the number of stations in London be diminished, with a view to establish stations in some of the largest towns in this country?—I believe not; the object has been to increase the vaccinators as the metropolis has been increasing.

192. Are you aware whether any applications have been made to the Home Department for the establishment of a branch institution in Edinburgh?—Yes, about three years ago.

193. It was referred to the Board, and they reported against the establishment of any branch institution in Edinburgh?—Yes; there was some good reason that occurred to the Board, and it was thought good by the Home Department when the reply was made.

194. Do you remember an answer of this kind: "The National Vaccine Board have given it as their opinion, that an establishment connected as a branch of this in London could not be maintained in Edinburgh without a considerable expense, and moreover that they do not think such a further establishment necessary, because the National Institution has hitherto been able to supply not only England and Scotland, but the Colonies, promptly and effectually, when application has been made for vaccine lymph"?—Yes, I remember it.

195. How is Scotland supplied with vaccine lymph?—We have applications continually.

196. Do you believe that Scotland is provided with vaccine lymph from this Board?—Every practitioner keeps it up as well as he can, but in failing applies to the Board.

197. Do you consider that occasional instances of vaccination failing to be a complete protection, shows that up to this period this disease is imperfectly understood, and therefore that the constant superintendence of a National Board is still required?—I do think so.

198. Is the object of requiring those practitioners who receive lymph to make a return, among other particulars, of the efficacy of the lymph so sent, to ascertain whether that lymph was taken between the seventh and eighth day, and so to prove the accuracy and care of those by whom it was sent?—That was one of the objects.

199. Is such a return the only mode of proving the genuineness of the matter so sent by the Board?—We believe so.

200. Have the Board authorized agents in most of the large towns in England?—Yes, I believe so; there is a list of the persons here.

201. Is there not a public institution in Edinburgh to keep up the vaccine matter?—I believe not.

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202. Has the Board in London found that the small-pox was taken by persons after vaccination, and after it had succeeded fully?—In some instances we have had small-pox after vaccination.

203. After the vaccine pustule appeared?—Yes.

204. Do you find that any children die in consequence of being vaccinated?—I do not know an instance of it; but by inoculation for the small-pox one in 300 will die, and one in 300 will take the small-pox after vaccination.

205. Can you ascertain what number of persons who take the small-pox after vaccination, die of the small-pox?—Very few indeed; it has occurred occasionally, but very rare.

206. As to the observations that were made in Edinburgh, on the occurrence of chicken-pox, or spurious small-pox, after vaccination, had the same observations been previously made by the Vaccine Board in London, and if made, where will the register of their observations on that subject appear?—I am not able to answer that.

207. Would it be right to allow inoculation with small-pox of those who had been previously vaccinated, and had the vaccine infection?—I think it is imprudent to do so. I am frequently consulted upon this point, whether this child, in order to make assurance doubly sure, had not better be inoculated. I have set my face against it, because by introducing an infection into a system, that is guarded against its natural operation, I do not know upon what part of the body it will fall.

208. It has been stated that Russia and Prussia have approved of the Board for the excellence of lymph?—Yes, and the readiness with which it is supplied.

209. Then lymph has been sent to Russia and Prussia?—Yes; in fact, they look upon this as the correct source of vaccine lymph, and every part of the world is applying to you.

210. Then this which is called the National Institution might be an European Institution?—It has a universal influence; there is a great deal in the acknowledgment of it; it is a testimony that they bear to the Institution here.

211. Do you know whether the vaccine-pox which you now make use of, is that derived from Dr. Jenner's disease, or that obtained from the cow by Dr. Woodville?—(Mr. *Simpson.*) It was from the cow in London; it was lost by Dr. Jenner; and the disease, as existing in London, is derived from the cow.—(Sir *Henry Halford.*) It is not improbable, that we can give a disease to the cow which will produce the vaccine pustule. A cow has had matter applied to it from a small-pox patient, and in the course of a certain time the cow has broken out with a pustular eruption, which has appeared to be the disease in question.

212. Do you trace the cow-pox to the same source of infection as the small-pox?—It is probable that the infection is the same.

213. Have you known any constitutions not susceptible of taking the cow-pox?—Yes, and I have known constitutions not susceptible of the small-pox.

214. Where have those observations upon wrapping a cow in a blanket impregnated with small-pox been made?—In London.

215. Who was the individual that made it?—I forget the individual, but it was partly by the direction of the officers of the Board.

216. Can you state who the individual is?—It is so new, and only one experiment; it should be pursued further before any safe conclusion can be drawn from it.

Clement Hue, M. D. called in; and Examined.

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217. YOU are Registrar to the National Vaccine Board?—I am.

218. How long have you held the office?—Nine years.

219. Describe the duties of that office?—To superintend and keep up the correspondence, both at home and abroad, on all subjects relating to vaccination, to arrange such matters, and submit them afterwards to the consideration of the Board at their different meetings, and to attend personally such meetings, and keep a faithful register of the transactions of the Board.

220. You register the names of the members of the Board who attend; and also an account of all the business that come before the Board?—Yes, concisely.

221. What does the correspondence principally relate to?—That part of the correspondence which I attend to, is that which is exclusively on the subject of vaccination;

vaccination; but the major part of the contents of the letters are applications for lymph, which fall under Mr. Simpson's department.

222. It is stated in this Return made by the Board to Parliament, that it is the special duty of the registrar to attend to the correspondence, foreign and domestic, to submit such to the Board, and to keep a faithful register of the transactions of the establishment. What does keeping a faithful register of the transactions of the establishment relate to?—Every thing transacted at the Board.

223. Connected with the distribution of lymph?—Yes, relating to the distribution of lymph.

224. The real nature of the correspondence will appear from the examination of the books you have this day produced?—Yes, the substance of it.

225. Are you in constant communication with the vaccinators at the stations?—No, Mr. Simpson is the inspector of vaccinators.

226. It forms no part of your duty to attend to the anomalous cases that occur?—Not to attend to them, but to make a register of them, or such as are deemed of interest, and have attracted the attention of the Board.

227. Can you state whether there is anything in the nature of the disease which the labours of the National Board have contributed in bringing to light by their publications or otherwise?—The publications of the Board on the subject of vaccination are chiefly confined to their reports to Parliament, in which you have the result of their experience and observation annually stated.

228. Where was the occurrence of chicken-pox, and a spurious form of the small-pox, to a great extent, after vaccination, first observed and published?—I am not aware of the circumstance alluded to.

229. Are you aware of the publications of Dr. Thompson at Edinburgh upon that subject?—Yes.

230. Had similar observations been previously made by the Vaccine Board in London?—Frequent reports of anomalous cases of disease have reached the Vaccine Board from their correspondents.

231. Have they reduced their observations upon that subsequent disease to the same degree of system and certainty that they appear to have been reduced to by the practitioner referred to at Edinburgh?—I am not aware to what novel feature in the disease the question alludes to; but a number of anomalous cases of disease after vaccination and modified small-pox have presented themselves to the notice of the Board.

232. Those are all registered?—The details of them are not; but we have the means of referring to the original letters, for not a single paper or letter received by the Board has been destroyed since its commencement.

233. What do you consider the most important of the present duties of the National Board, to investigate anomalous cases, or keep up a perpetual supply of lymph?—I should consider that their duty consisted jointly in effecting those two objects.

234. Looking at the intelligence of practitioners, and the multiplied means of publishing the results of their observations, do you not think that the investigation of anomalous cases may now be safely left to the activity of practitioners?—I do not think that it is pursued with that regularity by individuals as when the investigation is made with some degree of authority, and the attention of the practitioner is directed to the various points of detail.

235. Whether a Board were established and maintained by private subscriptions or the public, it would equally be the duty of such a Board to investigate and keep a register of all such occurrences?—Unquestionably.

236. Are you aware of the existence of other institutions in London to promote vaccination besides the National Vaccine Board?—I have heard of them generally; I am not aware of their particular nature.

237. You do not know by what means they are maintained?—Only generally; my information is not such as I can state with accuracy.

238. Do you know whether those institutions are efficient for their purpose of successfully promoting the practice of vaccination?—I have heard that they do so; but my observation must be more particularly directed to that connected with the Small-Pox Hospital.

239. Do you know whether individual practitioners have recourse to those other institutions for a supply of lymph?—Regular practitioners no doubt have recourse to those institutions, as they would to members of the profession generally, where the

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lymph may be distributed for mutual accommodation; and I can easily conceive that those institutions would be the first places to which their attention would be directed.

240. To which do you think medical gentlemen give the preference, the Vaccine Board or those private institutions for the supply of lymph?—If I am to judge from the extent of the applications made, I should say that the Vaccine Board was the most frequently applied to; and if I might allude to the thanks and acknowledgments we receive from different practitioners in the country, for the promptness with which they are supplied with lymph, and their professions of gratitude to the Government for the boon, I should think the Vaccine Board is the first place to which they apply.

241. Do you confirm the account given by Sir Henry Halford and Mr. Simpson, that, with some exceptions, the applications of druggists for the supply of lymph are generally refused?—I think there is a little misunderstanding upon that point of the evidence: the lymph is never refused to any one, except the application comes in some suspicious form, giving rise to the idea that it is to be made the subject of traffic. Some druggists have applied to us to provide captains of ships going abroad and we have sometimes thought that the manner in which it was made was not the regular and legitimate mode in which they might have applied; but even under such circumstances there are very few instances where it has been refused.

242. Why should it not become an object of traffic, if the effect will be to diffuse vaccination wider?—After the liberality of the Government in establishing a Board, where the supply of lymph is gratuitously obtained, we have thought that it would be strange that, by passing through other hands, it should be made the subject of mercenary traffic.

243. Is not the most successful mode of spreading it far and wide, to operate on the private interests of individuals; thus diffusing it in the same way as all other things considered good in themselves are diffused through the community?—It may be so; I do not know that even our suspicions are correct, although we have occasionally entertained them; and upon those occasions it has been withheld, or an explanation has been given, and a more regular channel of application has been pointed out.

244. Are the practitioners in London in the habit of vaccinating for the poor gratuitously?—Yes.

245. You believe that those private institutions do keep up their own supply of lymph, and that they distribute it amongst a considerable number of practitioners?—I doubt whether they do keep up their supply of lymph. I have my doubts as to some of them; and I have reason as to one of them to believe that it does not do it.

246. To which of the institutions does that allusion apply?—Am I absolutely obliged to answer that question.

247. The object is to ascertain whether private institutions are or are not capable of keeping up the supply of lymph?—I think it would be found upon the correspondence, and upon some of the minutes, that persons have applied to us, urging as a reason that they have failed in obtaining a supply from other sources.

248. To which sources do you refer?—I am applying it to the institution of Dr. Walker; whether it is now kept up by another person I do not know. I think I can make my assertion good as to that point.

249. Did the occurrence happen of late, or was it some time ago?—I have but an imperfect recollection of it; but I think I could bear out my assertion by referring to letters.

250. In answer to this question, will you endeavour to make a reference to the date?—I will.

251. Do your observations apply also to the Small-pox Hospital?—By no means.

252. If your observations do not apply to the Small-pox Hospital, is not that an exception to be made to the statement of the Board, that the National Establishment is alone capable of supplying lymph?—I am not aware, in respect to the Small-pox Hospital, that they have failed in keeping up a supply.

253. The question referred to a part of the letter published by the Board, in which they say, "In reply to the concluding part of your communication, I beg to state most unequivocally—and the daily experience of the Board and its extensive correspondence bear me out in declaring it—that it is utterly impossible to keep up a constant supply of lymph without some permanent established provision." Now if the Small-pox Hospital has been able to keep up its supply of lymph, does not that offer an answer to that observation of the Board?—That supply must have been limited as well as the demand; the demand upon the Small-pox Hospital must

must be very limited indeed; even individuals have kept up their supply for some years, but they have come to us to renew that supply. I could point out some instances in the minute-books, within the last few weeks, where a supply had been kept up by individuals for 15 or 20 years, but they have come to the Board ultimately, and acknowledged the obligations they were under to it.

254. Is not the keeping up a supply of lymph a question solely of expense; would not any other institution, able permanently to devote a certain income to keep up vaccination in this town, have the same chance of furnishing that supply of lymph that the London Vaccine Board is now able to supply?—I doubt whether the same funds which are supplied by Government, derived from private sources, could keep up an establishment which should carry with it that weight and that influence and authority, by means of which a supply of lymph would be constantly kept up, and vaccination diffused.

255. What has influence and authority to do with keeping up a supply of lymph?—With respect to the influence of the Board, and its means of diffusing lymph, the same regular establishment as the present organized Board, from whatever source it derives its funds, will realize the same purpose.

256. Suppose another institution to exist that has already a staff maintained out of its own subscriptions or endowments, such as the Small-pox Hospital; if the Government were to give to such an institution that portion of the Government grant that the Vaccine Board now devotes to actively diffusing vaccination, might not all that part of the grant which goes to the maintenance of the staff of the Board be dispensed with?—I do not think that any private establishment could keep up the lymph, or carry on as effectually the purposes now carried on by the Board; my opinion is founded entirely upon the experience of the past; it is merely stated as an opinion. It has been found that every institution established for the purpose has had only a temporary existence.

257. To what institutions do you refer, when you say such institutions have only had a temporary existence?—To the various institutions that have been established in the different provincial towns.

258. Confine yourself at present to institutions established in London. To which institutions established in London as having a temporary existence do you refer?—To Dr. Walker's.

259. Was that the Royal Jennerian Institution?—And that which Mr. Marshall had when living.

260. In Broad-street?—Yes.

261. Are there any others?—I do not know of any others.

262. Can you state the circumstances that caused them to fail?—No.

263. Did not the dissolution of the Royal Jennerian Institution arise out of private dissentions in that Society; and was not one of the causes of those dissentions giving too large an income to the principal medical officers of the establishment?—I am not aware that that was the case; but the very circumstance of private dissentions is an evil that is more likely to attend every private Board, and any fluctuating body kept up by the casual means of subscription.

264. You know nothing of the causes that led to the dissolution of the other societies?—No.

265. Suppose an institution, similar to the Small-pox Hospital, having already a considerable income, to devote a certain portion of its income, or a grant to a limited amount given it by Government, to the maintenance of stationary vaccinators, in the same manner as the National Board maintains stationary vaccinators; what should prevent that Board keeping up a supply of lymph?—Because it would be liable to the same objections that have already been urged to all private Boards.

266. What are the objections you mean?—The very causes of dissention in the Jennerian Institution might arise in those private establishments; the very jealousies between the different officers and parties might produce the same effects as we have already witnessed there.

267. Has not the Small-pox Hospital, which is a private establishment, endured for very many years?—I believe it has.

268. Do you know whether a very considerable portion of its income arises out of funded stock and endowments?—Yes, it does.

269. Would not any such permanently-vested stock afford a reasonable security for its permanency?—I do not know that it is sufficient for that purpose.

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270. Would not it afford a considerable degree of security?—It would afford some security, but not a considerable security.

271. Do you know that the institution in Broad-street carried on its vaccination for the period of 26 years, with an income at an average of rather less than 200 *l.* a year?—Yes, I am aware of it.

272. What do the officers of the Board, such as the president of the College of Physicians, the president of the College of Surgeons, the censor of the College of Physicians, the registrar and the inspector, really contribute to the active department of distributing and diffusing vaccination through the country, and permanently keeping up a supply of lymph; does not the real efficient part of the establishment consist in the persons who are the stationary vaccinators of the Board?—The stationary vaccinators I consider are the instruments; but the skill of the Council is the means that guides the whole machinery, and gives it its proper direction.

273. Might not all that be done by a single individual?—I think not.

274. Why not?—I do not think that any single individual would have such weight and authority; that his influence or opinion with the different correspondents of the Board would not have the weight of a Board so constituted as this Board is of men of character.

275. What part of the duties of the Board is it that requires that authority and weight; wherein is any resistance or friction experienced from those individuals who carry on the active department of the Board?—Opinions emanating from the Board carry considerably more influence and weight in the removal of prejudices amongst our correspondents than the mere assertion of an individual.

276. Do you think that any prejudices on the subject continue to exist among the medical practitioners in this country; does the same kind of prejudice exist which was endeavoured to be excited against vaccination in the early part of the history of the disease?—I consider that they exist to a less degree; but they exist to a considerable degree still.

277. Among the medical practitioners?—Yes, I fear among many.

278. Can you produce any instance?—Yes; many who are inoculating from small-pox, and have given up the use of vaccine matter, whatever their motive may be.

279. Within the last ten years in this country?—Within the last fortnight.

280. Where do those practitioners reside who, if left to their own unbiased judgments, inoculate with the small-pox in preference to vaccinating?—We have in the correspondence letters of complaints from individuals, some within 50 or 60 miles of London: we have instances of such reported practices.

281. Do you think that the circumstance of there being a Board, consisting of the president of the College of Physicians and the president of the College of Surgeons, superintending its affairs, affords the best means of removing existing prejudices?—I think it will contribute considerably towards removing them, in the first place; such practices as you may suppose are carried on by not the most respectable members of the profession.

282. Is not successful practice, and the publication of the results of that successful practice, the real mode of removing such existing prejudices?—Yes.

283. May not the result of the practice of institutions supported by private subscription be communicated to the world, and tend to remove those prejudices?—To a certain extent they will; the diffusion of knowledge generally will tend to remove prejudices.

284. Has not vaccination been carried on under the superintendence of the Vaccine Board for a sufficiently long period, and with a sufficient number of cases, to enable any reasonable man to draw from that experience all those reasonable conclusions that the case admits of?—I should have thought so, if I did not know the fact to be the contrary.

285. But why do you think, when the existing experience of the Board affords the means of arriving at every rational conclusion, that continuing that superintendence for a longer period is likely to remove any prejudices that may exist upon the subject; since the experience of the ten past years affords just as good a data for the removing of that prejudice as the experience of ten succeeding years is likely to afford?—Because I conceive that the operation of the same cause which has in the first instance tended to remove some of those prejudices, will, I trust, and I hope, remove those which may still exist. The same antidote may be productive of the same effect during a more protracted period of time.

286. The value to be attached to the Board must depend upon the confidence the public have in it?—Yes.

287. If there were other institutions in which the public place as great, or a greater degree of confidence than they do in the National Vaccine Board, the experience of such private institutions would have the same effect in removing prejudices?—I can only observe, that last year, when the Government contemplated the dissolution of the Board, the letters which we received from our various correspondents were expressive of the greatest alarm least it should be carried into effect, and expressive of the strongest hopes that it would not be so carried into effect, but that the Board would be continued, as they looked upon it as the main source from which they could obtain a supply of lymph that could be depended upon. Such expressions of apprehension that the Board might be dissolved came from quarters with which we have no connexion whatever, from the remotest parts of North Britain, and the remotest parts of Ireland, from perfect strangers, that we only knew by name; and they applied to us in consequence of the character and reputation which the Board holds in the country.

288. The National Board possesses an advantage over the private institutions in being allowed to send lymph post-free?—It does.

289. Have any representations been made by the National Board against the privilege asked for by other institutions of being allowed to send their lymph post-free?—I am not aware that any such representation has been made. I do not immediately recollect it; and if it has been made, it was only upon the ground that it was superfluous, as all public purposes were answered by this National Establishment itself.

290. You do not recollect it?—I do not; I can venture to say not.

291. Is there anything peculiar or superior in the mode of vaccination practised by the vaccinators of the Board over the method practised at other institutions?—There is nothing peculiar in the mode that I am aware of; it is performed with great care, and that dexterity acquired by practice, by well-informed and diligent and industrious men; there is a peculiarity in the mode in which the lymph is sometimes served.

292. Is there any peculiarity that the other institutions do not observe, observed by you in transmitting lymph?—I am not aware, except that they have adoped that plan of transmitting lymph in glass tubes, which originated with the Board.

293. Do you know that the lymph, when so transmitted, and sent to any great distance, fails more seldom than if transmitted by other methods?—I know, from the testimony of our correspondents, it is by far the most effectual mode of transmitting it, and not only upon foreign stations, but even our correspondents at home are very urgent in their applications for lymph to be supplied in such a manner; but the expense and time necessary do not allow of our always sending it, particularly to a short distance from home, in that way.

294. Does not the lymph so transmitted fail occasionally in hot climates?—Very seldom.

295. Less seldom than when communicated in other ways?—Yes, considerably less.

296. The members of the Board do not personally attend to any practical part of the vaccinating of the patients?—They do not vaccinate.

297. Nor personally superintend the patients?—No.

298. Is it not desirable that the persons vaccinating under the Board's direction should see frequent cases of small-pox?—Unquestionably.

299. Do you think that they are persons who frequently witness cases of small-pox?—Yes, unquestionably, in the course of their profession. They are persons connected with large establishments, and long in practice in their profession, and who have seen the disease in all its varieties, and are as competent to treat it as any individuals connected with institutions exclusively devoted to that purpose.

300. When an anomalous case of disease is reported to the Board, what steps do the Board take?—The inspector is generally desired to visit the case and report accordingly, assisted by the stationary vaccinator under whose care it may have occurred.

301. Do the Board from time to time draw up any abstract of the result of their practice, and communicate those observations to the world?—In the form of Reports.

302. The Reports to Parliament?—Yes; in them they give a summary of their observations for the year, and the result of their experience.

303. In no other way?—No.

304. You

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304. You would refer to the Reports made to Parliament as the only way in which the Board have communicated the result of their experience to the world?—Yes; that is the official channel in which it has been communicated.

305. Have any difficulties been experieneed by the Board in obtaining and keeping up a constaut supply of lymph?—Yes, very considerable.

306. Do you know that the stationary vaccinators have occasionally lost their supply?—I have heard of its having occasionally failed at one station and being renewed at another.

307. Did you ever hear of their applying to any private institutions to keep up the supply that they had lost?—Never.

308. Did you ever hear that the Vaccine Board of Dublin had applied to the Board in London to keep up their supply?—Yes; and so late as last week an application was made to the Board, from which I see in the minute this extract was taken. An application for lymph was made from the County of Clare Infirmary, and expressing at the same time their conviction, that the lymph supplied by this establishment was more efficient than any they had received from Dublin.

309. That does not state that the Dublin Vaccine Board had actually lost its supply?—No, it does not; but I shall refer to the letter, as I believe it confirms that statement: I find that application for lymph from the Small-pox Hospital, Dublin, was made, their own being exhausted, in January 1826.

310. With respect to the number of days in the week, and the number of hours, during which vaccination goes on at the branch stations, do you confirm the evidence already given upon that subject by Mr. Simpson?—Yes, entirely; he is much more competent to give the Committee any information on that subject than I am; it lies in his immediate department.

311. Do you not think, from the great demand there is for lymph, that in case of the national Board being broken up, there would be ample funds arising out of this demand for supporting a private institution for carrying on vaccination?—I can only answer, that by referring to the experience of the past, and the present time, in fact, every correspondent is throwing himself upon us for a supply of lymph; and in the last month we have had applications from infirmaries in the principal towns, Oxford and Northampton, and various places. I could give proof that they depend entirely upon the Board.

312. What was the date of the breaking up of the Royal Jennerian Institution?—I believe it was about 1807.

313. That is precisely the time of the institution of the National Board?—Yes.

314. Is it not to the effect of establishing a Government institution for vaccination, and supporting it from the Government funds, in a great measure, that the withdrawing of the support of the public from the Jennerian Institution is to be attributed?—I should think that the Jennerian Institution failed from the want of funds, and the dissentions that took place among them.

315. Would there have been any failure of funds but for the establishment of the National Vaccine Institution, and withdrawing, therefore, from the Jennerian Institution that support which up to that period it had actually received?—I should suppose it was liable, like every other charity supported by contributions, to a very capricious and partial supply of funds: the funds at one time may be very ample, and at another very deficient, which must paralize the exertions of the Board, which has for its object the keeping up a supply of lymph.

316. Has it not been found, with regard to every charity, that affording large funds from the public purse has had the effect of withdrawing from it that support which it would otherwise have received from public subscriptions?—It is impossible to say what support it would have received from public subscriptions. I cannot reason from the possibility of what would have occurred, or the amount of subscriptions in expectation.

317. Generally, is not this the result of experience in regard to all charities?—Yes; as a general proposition I have no objection to subscribe to it.

318. Do you know to what cause the breaking up of the institution in Broad-street is to be attributed?—No, I do not.

319. Was not it an institution principally supported by medical men?—It was by men who wished to establish a sure source upon which they might depend for a supply of lymph at all times.

320. Did they fail in their object?—Their object was very limited, and it was confined to a very few individuals indeed, the more immediate practitioners in the neighbourhood of the west-end of the town.

321. If an institution were to be supported by other funds than from a grant from the public, should you recommend it to pursue the same course for keeping up a supply of lymph that the National Vaccine Board has hitherto followed?—I am not aware that they could adopt a better.

322. It would be desirable to concentrate in one very large town all the machinery for that purpose?—Yes, I think so.

323. Supposing that there existed any other institution which has already a staff of medical men for such a purpose, would not an income of about 800 *l.* or 900 *l.* a year enable them to carry on the active part of the system which the National Board has been carrying on?—I think their operations must be proportionate to their funds. I cannot conceive, with a small income, that they can carry their purposes into effect as with more enlarged means; there must be a limit. Even at the present Vaccine Board, the business is increasing to such an extent, that I doubt very much, with the limited allowance of Government, if it increases much more, whether it will be able to answer the purpose for which it is wanted, without a larger grant: at present the grant of the Government has been often exceeded; and if there had not been a balance of a few pounds to enable us to go on, the grant, in some years, would have been inadequate.

324. Is the sum of 50 *l.* the least sum for which medical practitioners will consent to vaccinate twice a week during the hour of the days on which the stationary vaccinators of the Board vaccinate?—I do not think the sum of 50 *l.* given to a respectable member of the profession is too large to devote two hours a week; and he is not only an hour, sometimes he is two or three hours at his station each day. If the Committee think that the sum of 50 *l.* allowed for two hours a week devoted to that purpose is an enormous sum, I doubt whether any very respectable practitioner would be found to undertake it for less. Put it on the ground of charity, and the profession will come forward and do it gratuitously; but if you wish to remunerate, the remuneration is very inadequate.

325. Do you know whether the London practitioners do vaccinate the poor gratuitously who apply to them?—I know the profession are very liberal in their services rendered to the poor gratuitously.

326. Specially for this purpose?—Yes, for that amongst others.

327. Is it the practice to vaccinate and charge nothing for it amongst the poor?—Decidedly; a liberal practitioner would not charge for vaccinating a poor person, decidedly not.

328. On what principle is it that the stations, where vaccination goes on in London, are chosen?—Generally, the most populous districts, where the population is most dense.

329. Have you anything to add to the explanation that has been already given by Mr. Simpson as to the inequality in the salaries of the stationary vaccinators?—No, he has given you the true reason, I believe.

330. Do you think 150 *l.* a year is more than adequate?—I do not think Mr. Gillham would be adequately paid if he was to get 300 *l.* a year, Mr. Gillham amply earns it. He is the most active and industrious vaccinator we have; he has done more for the cause of vaccination than any other person whom I can name. I do not say that to disparage others; but he is most zealous in supporting the interests of the establishment. He manifests a zeal that you cannot pay.

331. Do you not think that one respectable man put at the head of a Board for superintending the labours of the different stationary vaccinators would afford sufficient means for carrying on with effect the duties now performed by the Board?—I have already answered that question in the former part of my examination, where I give it as my opinion that I do not think it would be so efficiently accomplished.

332. What duty is it that the Board performs that an individual could not perform?—I have mentioned their weight and influence, and their united wisdom in devising plans and suggesting modes by which the different details of the business are to be carried on. Those are the purposes to be accomplished by a Board, and which you cannot expect to find in any individual. You have the first men in the profession superintending the Board and giving a large portion of their valuable time in organizing and directing it.

333. What sort of difficulty has occurred within the last five years before the Board, which required the united wisdom and thought of the five gentlemen who now compose the Board?—There are many cases occurring of the different forms of the disease, upon which, as upon every other professional subject, opinions may be collected, and more correct conclusions be formed.

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334. In the early history of the Board, was not it found that the united wisdom of eight instead of five were required?—Yes, it was; their labours were very considerable in allotting and distributing the several duties of the officers of the establishment.

335. Have their labours consisted of anything but answering the various applications made to them. Have they, of their own accord, appointed vaccinators in different parts of the country, or in different parts of the world; or have they deferred doing so till applications were made to them for that purpose?—They have, of their own accord, frequently looked out for stations in different parts of the country. It has been urged, this is a district where a person should be appointed; let us see if one has been appointed, if not, let us inquire who is the most respectable practitioner there, and request him to take it upon himself; and if, upon the correspondence, an individual has shown more zeal in the cause, we have begged him to accept the usual form of diploma, which has been conveyed to him as an acknowledgment on the part of the Board of the manner in which they estimate his services.

336. Have you ever considered the propriety of devoting any portion of the public grant to pay stationary vaccinators in any of the large towns in Great Britain?—That has often been a subject of consideration at the Board; but our limited resources, and the grant from Parliament, has not afforded us the means of paying vaccinators in the country.

337. Would the concentrating some of the stations in London afford you better means for keeping up a supply of lymph, than maintaining the present number?—I think not; the more numerous our vaccinators are, the more sources we have for supply.

338. If you contracted them to a certain degree, would there not be a larger number of cases at each of the stations?—Not in the same proportion; on the contrary, the number of vaccinators is too small, and it has been felt that it was desirable, with the increasing population of this city, to increase the number of vaccinators also.

339. Are you aware of many instances of small-pox having occurred of late years, in general practice, in consequence of vaccination having been carelessly performed?—A great many.

340. Are you not of opinion that a certain degree of doubt has been thrown upon the efficacy of the practice, in consequence of these apparent failures?—Yes, unquestionably; and I would beg, in illustration of that, to refer to a practice that was adopted at Banbury, where a female, with the best intentions, but very little education for that purpose, volunteered vaccinating the poor. The manner in which the operation was performed was very rude; it was done, as she expressed it, by cutting, and the consequence was that it produced inflammation, and a large scar like a burn upon the arm, and brought on a disease totally different from that mild form which we wish to substitute for a loathsome disease, and the consequence was that one individual actually died of small-pox afterwards in the Small-pox Hospital; a sure proof of the want of dexterity in introducing the lymph, and the false security into which she lulled that unfortunate being.

341. Have you often known small-pox taken after vaccination by bad lymph?—I should consider when small-pox occurs after vaccination, it must be partly attributed to such a cause; it has not been the genuine vesicle, it has been a pustular sort of eruption.

342. Do you not consider that the existence of such an institution as a national institution contributes to prevent the general introduction of a spurious kind of infection?—Yes, unquestionably; and I cannot conceive how any practitioner can depend upon the lymph, if he is deprived of this source; if he is without it he will in a moment of emergency substitute some of a doubtful sort, and we should be at a loss for a vocabulary to express the various forms of disease that would arise.

343. Does your experience lead you to think that an equally good lymph would not be in general use, and could not be had by practitioners, if there was not such an institution?—I have not the least doubt that without an authentic source like that which Government is keeping up, we should have no lymph upon which we could depend. We now have character and reputation and sense of duty to guide us, which give to the establishment all that weight and influence which it should derive from the nature of its constitution.

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344. Are you not of opinion that the authority of the Board is useful in regulating the proceedings of the vaccinators, and securing the discharge of their duties?—Assuredly.

345. Is the treatment of any other diseases regulated by the authority of a Board?—The treatment of any disease which is recommended to us by the concurrent testimony of men of experience in their profession, must always claim no small portion of our attention and interest.

John Treadwell Simpson, Esquire, called in; and further Examined.

John T. Simpson, Esq.

346. YOU are the Inspector employed by the Vaccine Board?—Yes.

347. You reside at the central station, No. 8, Russell-place, Fitzroy-square?—I do.

348. How long have you held the office?—Eleven years.

349. What are the duties of your office?—The duties of my office are to superintend the general business of the establishment; to receive reports and returns from the stationary vaccinators, and occasionally to visit their stations to examine their books.

350. Do you visit the stations at any regular periods?—No, not all on the same day; but each occasionally.

351. Do you keep any book containing the observations you make, or what you witness at the stations, and do you make any report to the Board of the result of your examinations?—When I visit the stations I make verbal reports to the Board at the next meeting.

352. Is any record kept of the reports?—If there is anything extraordinary, it is recorded by the registrar.

353. Any extraordinary observations you have to make, will be found recorded there?—Yes; but I do not think there are many.

354. Is it your duty to receive and distribute lymph both at home and abroad?—It is.

355. Can you state what the receipt and distribution of lymph annually costs the Board?—No, I could not exactly.

356. Your business is to receive and distribute the lymph both at home and abroad?—Yes.

357. Independent of your salary, can you state the expense?—There is considerable expense in the ivory points, and the glasses and stationery.

358. In the account rendered to Parliament in 1821, there are detailed stationery, squares of glass, ivory points, platina vaccinators, and glass tubes?—That is all very correct; the mere article of ivory points costs the Board 60 *l.* a year; the squares of glass are cheaper.

359. Do you know whether the accounts which have been rendered pursuant to the order of the Committee, contain the details of the annual expenditure?—I do not; it is not in my department.

360. How many anomalous cases have been reported by you as occurring amongst the stationary vaccinators during the last year?—Not above three or four; they very seldom occur. It is the duty of the stationary vaccinators, whenever anything of the kind occurs, to report the circumstance to me, and I visit them.

361. How many anomalous cases has the Board directed you to visit during the last year?—I do not think any.

362. Could you state, by reference to your books, how many anomalous cases you have had reported to you by the stationary vaccinators during the last five years, and how many of them the Board has directed you to investigate?—By reference to the books I can tell. There were a very few cases, (speaking from recollection only, as I have no detailed account of them); but they were of so very mild a nature that I did not make formal reports of them to the Board.—[*The Witness was directed to prepare a statement of the same.*]

363. Have you had any occasion to report any irregularities on the part of stationary vaccinators?—Very seldom. Sometimes when we have thought the supply of lymph was too small, they have been admonished to endeavour to increase it.

364. Have you discovered that the operation has been badly performed at the stations?—No, I think they generally vaccinate as well as possible.

365. Have you ever discovered that the operation has been badly performed at any of the private institutions in London?—I have no reason to suppose so.

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366. Who is it that fixes the branch stations?—They are appointed by the Board.

367. Upon whose report is it that they appoint them, or upon whose advice?—When a vacancy occurs, there are generally on our list a number of what are called extraordinary vaccinators, who vaccinate gratuitously, and when vacancies occur they are generally solicited to fill up the stations, where they are paid.

368. Are not the extraordinary vaccinators the candidates to fill up the office of stationary vaccinators?—Generally it is so.

369. On what principle is it that these extraordinary vaccinators are appointed to fill up those offices of stationary vaccinators?—They are generally men of character in London, and known to the Board as having been extraordinary vaccinators for some time.

370. Do you yourself perform vaccination at your residence in Russell-place?—Not constantly; I do it occasionally. It is not part of my duty.

371. Who is it that performs vaccination at your residence?—Mr. Carpue.

372. How often does he attend?—An hour every day.

373. What is that hour?—From 10 to 11.

374. Is that a convenient hour for the poor to attend?—It appears to be so.

375. You have heard no complaints of that hour?—I have not; and the increasing number of applications proves, I think, that it is a convenient one.

376. Is it your own house you reside in, or is it a house provided by the Board?—It is provided by the Board.

377. You reside in a house provided by the Board?—Yes, I do.

378. Can you state, besides the rent, what is the expense of that house? No, not exactly; it will appear by the treasurer's account.

379. Does the Board pay for the housekeeper?—There is no housekeeper; there was formerly.

380. What part of the expense of the establishment of that house does the Board pay?—They pay rent and taxes, but a great portion of it is occupied by them, the lower part by the persons who come to be vaccinated, and by the people who come there on business, and the upper part for the meetings of the Board, the drawing-room.

381. Will the returns you have brought with you state the number of patients vaccinated at the central station?—Yes, they do; but the principal part of my duty is receiving the lymph and distributing it to the applicants from the country; I receive it regularly from the stationary vaccinators, and I every day receive the letters from the Secretary of State's office; I open them and pack up the proper quantity of the lymph for each person with a great deal of care, which is absolutely necessary, and enclose it in a cover, that is sent down to the Secretary of State's office to be franked; and that employment, with others, occupies me three or four hours a day.

[The Witness corrected his evidence by stating that the answers to letters were sent the day after the letter was received.]

382. Who does, in point of fact, prepare the ivory points, and the glass and the glass tubes?—The stationary vaccinators.

383. Your duty is to receive those points, &c. so prepared, and having received them, to pack them up and transmit them to different applicants?—Yes.

384. Is there a regular supply brought to you by the stationary vaccinators, or do they afford you a supply according to what you represent to be the call for it?—They afford constant supplies, and sometimes there is scarcely enough to answer the wants of the institution. When those charges of lymph are distributed and sent into the country, a most exact account is kept of them. Here is the lymph, and a certain number of points charged by Mr. Carpue on the 29th of January; here is another by W. T. Lewis; and the number from which the lymph is taken on the book is 21,242, and doing this, and packing it up, occupies three or four hours.

385. How long a portion of your time is occupied in each day in entering the quarter from which you receive the prepared points or squares, and in packing them up and transmitting them to the several applicants?—When there are as many as 30, it would take three hours; but besides that, I am expected to remain at home till 2 or 3 o'clock every day to furnish lymph to those who apply for it personally.

386. What hour of the day do your duties commence, and when do they terminate?—They commence at 10 and terminate at 2; very often I am employed longer than that. When there is not a supply of vaccine lymph sufficient to answer all the letters, which are hardly ever delayed more than a single day, I have to send

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or go to one of our stations where they vaccinate later in the day, and endeavour to get a supply in time for the evening post.

387. What is the whole of the emolument you receive; there is a salary of 200 *l.* a year, and a portion of the house you occupy; what other emoluments have you?—Coals and candles.

388. Is the servant who takes care of the house paid by the Board?—No; there is no servant; there is a messenger employed to fetch the letters from the Secretary of State's office, and to take back the answers.

389. The domestic establishment for taking care of the house, by whom is that paid?—By me individually.

390. No allowance is made to you by the Board for the domestic establishment of the house?—None at all.

391. Then you receive a salary and occupy the house, and you have coals and candles; does that comprise all the emoluments you receive?—It does; the man employed by the Board does things for me, but I remunerate him for it.

392. Does he act as your servant in receiving remuneration from you?—He occasionally acts as a servant; he does not sleep in the house.

393. Do you know anything of the private institutions that carry on vaccination?—Yes, I know them.

394. Have you ever any communication with the officers of those institutions?—Only casually.

395. Do you know that they supply a considerable number of medical practitioners in London and the country?—I dare say they do.

396. Have you heard any complaint of the efficiency of the lymph that they supply?—I do not know that I have.

397. Do you know of any difference in the mode of vaccinating between their mode and the method adopted by the Vaccine Board?—No, I do not; the fact is, they generally do it much in the same way.

398. You think that their methods are equally good?—Yes, I should think so.

399. It is an operation now very well understood?—Yes, very well.

400. It was said there was a difficulty sometimes with your Board in procuring matter in the winter?—Yes.

401. What does that difficulty arise from?—From people not coming to be vaccinated in the Christmas week; last Christmas there was a very great difficulty in the whole of the stations; very few were vaccinated.

402. In consequence of cold weather?—Yes.

403. And the mothers are not willing to bring their children?—No.

404. Would not that difficulty be increased if the stations were diminished?—Yes, in proportion to their relative distances.

405. You were a surgeon in the Guards?—Yes.

406. You have practised vaccination yourself?—Yes.

407. Can you distinguish the different forms of the disease?—Yes.

408. You have seen the small-pox?—Yes, but not much lately.

409. Have you seen it so lately as to be able to judge when it exists after vaccination, or in combination with the vaccine disease?—Yes, certainly.

410. What is the original source of the lymph which the Vaccine Board are now using; was it derived immediately from the cow, or was it derived from one of Dr. Jenner's patients?—I believe, on recollection, it was from one of Dr. Jenner's patients; there being at the time a difficulty in procuring lymph, some of the stations might have lost their supply, but others, for instance Mr. Gillham's and Mr. Leese's, never failed.

411. It is the disease that exists at the Small-pox Hospital, that was derived directly from the cow, through Dr. Woodville?—I have heard it was so.

412. But the stationary vaccinators of the Board had their disease from Dr. Jenner's patients?—Yes.

413. Do you attend all the meetings of the Board?—Yes, all of them.

Charles Murray, Esq. called in; and Examined.

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414. YOU are Secretary to the National Vaccine Board?—I am.

415. How long have you been so?—From its first institution in 1809.

416. What are the duties of your office?—They consist in attending the Board.

417. Do you attend all the meetings of the Board?—Yes, all the meetings, and I issue the summonses.

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418. Did you not belong to the Royal Jennerian Institution?—Yes.

419. What occasioned the dissolution of that society?—The dissolution of that society was occasioned in consequence of some different treatment adopted by Dr. Walker, who had been elected medical inoculator, upon which a controversy took place, he defending his mode of vaccination, and Dr. Jenner, by whose influence he had been elected to that situation, totally disagreeing with his practice; and the consequence of this was, that remonstrances took place on the part of the Medical Council. There were two Boards; I was secretary to what may be called the Civil Board, and he attended the Medical Council. Remonstrances were made as to some published avowals of Dr. Walker's of a different process of vaccinating the patients and treating the pustules, which Dr. Jenner considered as opening a door to great danger to the success of the practice; and the result of this was, that Dr. Walker persisting in his opinions and practice, Dr. Jenner felt, and most of his friends at the Medical Board, which consisted of some of the first physicians and surgeons of the metropolis, considering that Dr. Jenner's mode was simple, that it was found perfectly correct, felt, that it ought not to be deviated from; but Dr. Walker still persisting in his own mode of inoculation, a variety of discussions took place, which led to something like partisans on the one side and the other, until at length it was found necessary to discharge Dr. Walker from his situation. The result was that several meetings took place, and one very large General Court of the society, in which it was determined to confirm the resolution expelling Dr. Walker. This was brought before the General Court, and the consequence was that Dr. Walker was threatened to be expelled by a very large majority, in consequence of a number of noblemen and gentlemen feeling that Dr. Jenner ought to be supported; but instead of coming to that vote, for which they were prepared, Dr. Walker was prevailed upon by some of his friends, and was permitted to resign. This was considered tantamount to a dismissal, but he immediately, with some of his friends, among whom were some gentlemen in the city by whom he was patronized, set on foot an institution called the "London Vaccine Institution."

420. That exists at the present time?—I believe it does. The circumstance created, undoubtedly, divisions in the society; and in consequence of the large outfit of the institution, and the expenditure occasioned by a very expensive house, in which Dr. Walker resided, but with which I had nothing to do, and a great many other contingent expenses, a large portion of the capital fund had been exhausted, which, from the zeal that existed at the first formation of the society, amounted to a very considerable sum. In fact, the royal family, the principal nobility, and the leading professional men, had come forward very liberally, the latter not only giving their time, but subscribing their 10 or 20 guineas. This fund, that had bid fair to place the institution on a permanent footing, failed considerably. The capital had consisted principally of what were called life subscriptions; the annual subscriptions were not adequate to keep up the expenses of such an establishment, and the result was an apprehension that the whole thing would fall to the ground. Under those circumstances Dr. Jenner entered into some negotiation with the members of the Government to consider whether it would not be wise to form a National Board, that there might be no dispute about the practice, and no want of a constant supply of lymph for the United Kingdom and other parts of the world, and that there might also be a reference, in case of necessity, to an authority which it was supposed would be beneficial. At that time I had the honour, in consequence of my having co-operated in the formation of this large society in 1803, of being, so far as related to the organization of the new Board, consulted by Dr. Jenner and the late Right Honourable George Rose, who took the matter up principally from his having been eye-witness to some difficulties that had occurred with regard to the Jennerian Society, and being of opinion that a National Board was necessary to carry on the business of vaccination with full and beneficial effect.

421. Then the Jennerian Society, while it existed, was supported by very large funds?—Yes, in the first instance.

422. And at that period, when those dissensions arose, the income was very considerable?—No, not very.

423. What was it?—Greatly diminished below the first amount.

424. Was not one of the causes of dissension the very large income that Dr. Walker was receiving, namely 500 *l.* a year?—He did not receive nearly so much as that.

425. Please to state what was the income that Dr. Walker, the principal medical officer of the institution, was in the receipt of previous to these dissensions?—I am not

not sure whether it was 200 *l.* or 300 *l.* a year, with a residence in the house belonging to the society in Salisbury-square, and coals and candles, and a servant to take care of the house. I think his emoluments did not exceed 300 *l.* per annum.

426. The two new societies which branched out of this, were the present National Board, on the one hand, and on the other hand, the London Vaccine Institution?—Yes.

427. Did not the London Vaccine Institution for some time take the name of the Jennerian Society?—It did. Dr. Jenner, and all those who had taken a leading part in the Jennerian Society, considered, in 1808 or the beginning of 1809, that this society was superseded by the establishment of the National Board; but Dr. Walker, through some members of that society, rallied some friends of his and called a meeting, which he termed an authorized meeting, of the Jennerian Society, and he thought fit to adopt the title of "The Royal Jennerian Society," in addition to that of "The London Vaccine Institution;" I think it had that double character.

428. Did not the City of London subscribe to that London Vaccine Institution?—I rather think they did; they had subscribed to the Jennerian Society very liberally.

429. Has the London Vaccine Institution or the Jennerian Society existed uninterruptedly from that period to the present time?—I understand it has.

430. Had not the Jennerian Society at that time the privilege of sending lymph post-free?—It had.

431. Do you know why it was deprived of that privilege?—I do not know.

432. Do you know that it is deprived of it now?—It was not up to the time I have mentioned.

433. But after the period of the dissensions?—Yes, I believe it was.

434. Had you anything to do with any representation, in consequence of which it was deprived of the privilege of sending lymph post-free?—No. I had some intercourse with Sir Francis Freeling when the privilege was granted, and occasionally subsequently; but there were some circumstances which occurred when the society was broken up, which induced the Government, I suppose, not to continue the privilege any longer.

435. What were the circumstances that occurred?—Something about some letters, from which they thought it was abused.

436. You know that from some credible authority?—Yes, I think I may say so.

437. Have any complaints been made to you, as secretary of the Board, of the deficiency of lymph?—No.

438. Do you open the letters that come to the Board?—No; they come to the house, and they are opened by Mr. Simpson.

439. You have very little cognizance of the medical correspondence of the Board?—All the medical correspondence brought before the Board I see; it is very often connected with questions in some degree relative to my profession. Probably the Committee are aware I am not a medical man. There are magistrates and others who occasionally write from the country, stating that itinerant inoculators are going about and spreading the small-pox; cases of that kind occur, and professional men occasionally write to say that some new practitioner has come down and offered to inoculate for the small-pox for a very small amount, by which means the small-pox, which had been absent from a place for a considerable time, has been introduced, and wishing to know if there were any means by which those persons could be punished or prevented; and those are cases which have called upon me to correspond with individuals from time to time.

440. Can you state how many such cases have arisen, where it has been stated that itinerant practitioners were inoculating in the country?—I should think hardly a month passes without some occurrence of the kind.

441. What description of persons are those; are they regular practitioners?—From medical persons down to tinkers and women.

442. Can you state whether any considerable proportion of those who do so, are regular medical practitioners?—I am sorry to say there is a considerable number of them; there are complaints of such.

443. Could you produce an account stating what was the income of the Royal Jennerian Society previous to its dissensions, and what was its expenditure?—Yes, I think I can; I think I have all the annual reports.

444. Could you give two years' reports previous to those dissensions?—Yes, I think I could.

445. You

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445. You having had experience in both these Boards, what advantages do you consider belong to the National Board that were not possessed by that private institution?—I think the peculiar advantages of this Board are, that it brings into a focus, as it were, all that relates to vaccination, under the stamp of authority, which enables them to disseminate the lymph, upon the pledge of its genuine character, to all parts of the world, and to carry on the system of vaccination in such a manner, that where the least inaccuracy takes place in any of their operators they have the power of discharging them, or reforming their practice.

446. Are you aware what reasons can be given why any institution, having the same income to expend, should not have the same power of displacing its subordinate officers?—If the Committee mean any institution supported even partially by voluntary contributions, I certainly have the experience of the fact. I have mentioned that, in even apparently the best appointed society, for I must say, and I have had some experience in public charities, that I never saw any one that bid so fair for carrying its objects into effect as that which was established in the way I have mentioned, the Royal Jennerian Society; and yet having seen that broken down, in a great degree owing to the want of government over the officers connected with it, I should say that no charitable institution, even partially supported by charitable subscriptions, could have efficient means of promoting the object of this institution, or in any manner equal to it.

447. Do you know that a considerable number of medical practitioners in town and country do not now depend upon the National Vaccine Board, but on the Small-pox Hospital and the London Vaccine Institution for the supply of lymph they require?—I know that the Small-pox Hospital vaccinates very extensively, and supplies a great quantity of lymph, but how far it is encouraged by the medical profession I am unacquainted. With reference to the London Vaccine Institution I have great doubts, I will not say of the utility, but of the efficacy of that institution; because I have known all along the manner in which it has been carried on. In the first place, Dr. Walker was so reduced in the support of the institution, that the only means of carrying it on in a limited way was by what the President has adverted to, namely, by sending a book containing a report of the proceedings of the society, and writing to A. B., or any individual, and requesting him to do them the honour of accepting the office of vice-president, and then calling upon him for a guinea subscription. It so happened that one of my sons received one of those circulars, and I saw them in the hands of several persons, enclosing them a diploma; I do know that by those means from time to time certain funds were raised, which enabled the institution to go on, but what its success was with regard to vaccination, or what satisfaction was given by the individuals who set this on foot, I am unable to state.

448. You do not know whether the London Vaccine Institution and the Small-pox Hospital, or either of them, have been able of themselves to keep up their own supply of lymph independently of any other source?—No, I do not.

449. Considering the great demand which there is from the medical practitioners throughout the country for lymph, and the number of those practitioners, do you not think there is great prospect, if the Parliamentary grant were withdrawn, of the institution supporting itself by contributions from these practitioners?—I certainly think not.

450. Why do you think not?—My opinion is, that whatever the zeal may be with which a charitable institution is first established, so many circumstances arise to diminish that zeal and lessen the amount of subscriptions, that the chances are very great of its ultimately failing to carry on the business to that considerable extent which must necessarily be effected by a national establishment.

451. If you were informed that the Small-pox Hospital has an income depending not upon subscriptions, but upon interest of money in the funds to the extent of 800 *l.* a year, do you not think that a smaller grant of money than 2,200 *l.* a year made to such an institution, judiciously applied, would be sufficient to keep up a supply of lymph, and to afford a supply to all applicants?—I think it is extremely probable that an institution with such a capital to set out with, and with the assistance of a small sum from Government, might extend its means so far as to effect the object mentioned as to the supply of lymph.

452. Then from those two sources, that is, from the interest of the capital it possesses, and from a moderate grant from the Government, aided by contributions, do you not think there would be every prospect that such a society would be able to perpetuate the supply of lymph?—I am not so well qualified as a medical man to speak to that.

453. As a man of business?—Confining the question to that single point of keeping up a supply of lymph, it might be so effected.

454. Might not such an institution, in return for the lymph it supplies, make it a condition to all those who receive it, that they shall furnish an account of the distribution of lymph and all anomalous cases that occur in the course of their practice, in the same manner as similar returns are now made to the officers of the Vaccine Board?—I doubt whether it would be so; there would not be that confidence in an institution supported in the way mentioned, which would keep up a regular correspondence and a regular intercourse in a way adequate to the original intention of this establishment. That intention was two-fold; I recollect perfectly well, and I can refer to the vote of 1808, it was to establish a Board that would be considered beneficial to His Majesty's subjects in promoting vaccination; and I know, if not expressed in the first grant made to the Board, it was strongly expressed at the time as a reason to the House of Commons by those who advocated it, that it would insure, under the sanction and authority of Government, the circulation of pure lymph throughout the country.

455. Is not confidence the result of experience in past good conduct; and if the public are informed of the fact that this Small-pox Hospital during a long series of years has conducted its business well, and has supplied pure lymph, would not the public be likely to place confidence in the management of the business relating to vaccination conducted by such an institution?—If I may be allowed to speak by comparison, I should say to a certain extent that such an establishment would be efficient; but to the extent contemplated, and that which has been so reiterated in the reports of this establishment, from the large mass of business that is carried on to an extent, I may say, unprecedented, and apparently unlikely to be met with by any other Board, I should think it quite impossible that a Board consisting simply of individuals not recognised by Government, nor bearing the character of a national establishment, could have the same effect.

456. Might not the Government make these terms with such an institution, that if the institution were to contribute an income to the amount of three-fourths, the Government would contribute an income in aid to the extent of one-fourth, and in return for that, exercise a degree of control over that institution, requiring of them the distribution of lymph to all applicants gratuitously?—I think that the great difference of such a Board would be the knowledge of the public that it was not any longer under the sanction of Government, because it was partaking of the character of a private charity; and there could not be that confidence in the officers of such an establishment equal to that where it was known, as in the instance of the present Board, that the highest characters in the profession in London are the managers.

457. Whatever value attaches to it, would not a grant so given by the Government, so far give that sanction you speak of, and raise such an institution in the estimation of the public?—I am hardly prepared to say whether it could, to the extent applicable to that public confidence which is reposed in the present National Board.

458. In the evidence which you have heard given here to-day, did you advert to the very small portion of income now received by the National Board which is applied to the active part of the Institution, namely 950 *l.* a year, distributed amongst the stationary vaccinators, and 283 *l.* applied to the contingent expenses of the Board; so that the expense of what may be considered the active operations of the Board are only to the extent of one-half the present Parliamentary grant?—I am aware of that; but admitting the weight which can be attached to it, knowing as I do the origin of this establishment, and the weight that was attached to the high character of those who had the management of the Board, as a part of its apparatus, I apprehend that that part of the expense referred to must be incurred, by the circumstance of its being impossible to expect that men of high rank can undertake the business of Government, for a particular object, with a view to extend the beneficial practice of a beneficial discovery, without having their time in some degree compensated for.

459. Are you not aware that great importance was attached at the early period of the institution of the Board to appointing medical officers of great weight and authority, as tending to give weight and authority to the practice of vaccination; but after a long successful practice of vaccination for 30 years, is it not your opinion, that the weight and authority derived from such appointments may now be reasonably dispensed with?—I am afraid not, from the continual difficulties that are arising, even at this period, and which are so much to be deplored. With respect

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to the extension of the practice of vaccination, I think, both in this country and throughout foreign countries, it would have the effect of increasing those difficulties and doubts, if such a change were to take place, and the establishment was resolved into something of a less high character.

460. Are you aware of a single medical practitioner of any eminence and character in his profession, who doubts the protective nature of vaccination against small-pox?—No, I am not aware of any.

461. Therefore those doubts exist in the very lowest characters of practitioners, if they exist at all?—If they are sincere; but the National Board is one great means of guarding against the improper conduct of this lower class of practitioners, who abound still so much in several parts of the country and in some of the towns. The great guard is the existence of this Board; whereas, if this Board was abolished, I conceive that the number of those whose interest it is to disseminate the small-pox, for the purposes of their own private emolument, would increase; and I may here advert to something that is rather professional. But in three instances I was called upon some years ago to prosecute individuals who had disseminated the small-pox in some courts and alleys in London. The notion was general that any man had a right to inoculate his own child, and, if he pleased, to let it take the air, and thus with impunity to introduce the disease among others who were not protected. We knew that the law was different, and remonstrance being in vain, two or three examples were made, which are reported in the books. These prosecutions, two of which were against medical practitioners, were carried on, and the parties convicted of wilfully disseminating the small-pox; and we advert to those cases now, in a printed paper, which I drew up, as a caution to country practitioners and others. There it was done under the authority of the Board, having the sanction of Government, and however wide the mischief might spread, supposing such a Board did not exist, there would be no security, although it might be taken up individually, if persons thought fit to do it. I make this explanation as one ground for showing that this Board must always continue to have great weight, and if it no longer existed, there would be great confusion upon the subject; and the practice, however efficiently it might be for a time carried on by another constituted Board, could not have the same beneficial effects upon the minds of persons, in the country in particular, and in other parts of the kingdom.

462. You think the withdrawal of the sanction of Government, and the separation of these high medical authorities, would operate as a discouragement?—Yes; it would loosen the bond that exists between public opinion and the efficacy of vaccination exceedingly.

463. If the ground for withdrawing public support were stated to be, that great success that had attended the practice of vaccination, and had caused the removal of all those doubts which were the grounds originally for instituting the Board, would not that false impression on the part of the public be most likely prevented?—I think decidedly not.

464. Not even if the removal of all those doubts were stated to be the ground for withdrawing the public grant?—I think it would not have a full effect.

465. Then you admit assigning such a reason would have the effect, to some extent at least, of preventing a false impression?—Yes, for a time.

466. You ascribe the failure of the Jennerian Institution entirely to the want of the authority of a Board of Commissioners to sanction its regulations as to the mode of practice?—To a great degree certainly; it would have been carried on for a considerable time longer, even with the diminished funds which it possessed, because Dr. Jenner had the means of rallying so large a proportion of the public in support of it; but the insubordination of a single individual, as I consider it, produced such confusion as to occasion its discontinuance.

Mercurii, 20° die Martii, 1833.

HENRY WARBURTON, ESQ., IN THE CHAIR.

John Painter Vincent, Esq., called in; and Examined.

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467. YOU are President of the College of Surgeons for this year?—I am.

468. As President of the College you are member of the Vaccine Board?—I am.

469. The President of the College of Surgeons is elected annually, and therefore holds his seat at the Board for one year?—Only in that capacity; but hitherto the Board consisted of the senior vice-president of the college, as well as the president, therefore it so happens that I am now for the second year in the Board.

470. Is the senior vice-president at present, by virtue of his office, a member of that Board?—No, because last summer the Board was reduced in number.

471. Therefore at present there is only one member of the College of Surgeons a member of that Board?—Yes.

472. What do you consider to be the principal and most important duty of the Board?—I consider the duties of the Board to be various; and first of all to hear the reports from the country of the several irregularities resulting from vaccination; to procure and to study the means of getting the vaccinators to obtain sufficient quantity of lymph in London to supply the demands, but particularly to see that efficient persons are appointed to those situations, as they should be men of intelligence, and men who understand the general principles of pathology; in short, they should be men of general information.

473. Will you go on to state what you consider to be the other duties of the Board; is maintaining a constant supply of lymph in London one of the duties?—The most important of all, I consider, decidedly.

474. Ascertaining the various anomalous forms of the disease, and ascertaining the number of cases in which small-pox takes place after vaccination?—Yes.

475. Is any register kept of the cases of small-pox after vaccination that occur in those patients who are vaccinated directly or indirectly by the Board?—Yes; by the vaccinators appointed by the Board particularly.

476. Do you suppose that from the data in possession of the registrar, returns could be made out of the per centage of cases in which small-pox has taken place after vaccination?—I should think there would be ample grounds for that. As to per centage, certainly, as to how many cases in a hundred.

477. Does that include as well those who are vaccinated by stationary vaccinators in London, as those who are vaccinated by correspondents of the Board in the country?—The statement from the resident vaccinators in London would be correct; the reports from the country corresponding members I should have great reason to rely upon, certainly, but should not be able to feel that strong assurance of their correctness as I should of the stationary vaccinators' reports.

478. Has the Board published from time to time any account of the anomalous cases which have occurred within its observation for the information of medical men?—I am not aware that it has done that, but the anomalous cases are those which are generally known to the profession, and nothing extraordinary has occurred since I have been there.

479. Is there anything peculiar in the method of vaccination recommended by the Board to be pursued by the vaccinators it employs, or is that method usually followed by the vaccinators of the other vaccine institutions in London?—The Board endeavour to find the most correct way of having vaccination performed; but then they by no means wish that that should be otherwise than promulgated to the profession, and indeed I am not aware there is any difference at all.

480. Is the mode pursued by the Board better than the mode pursued by the other vaccine institutions in London?—I am not aware that it is, because I think the Board would be desirous that every member of the profession should pursue the same system as they do.

481. Has the Board itself introduced any great improvement in the mode of vaccinating?—I am not aware that it has; because I think Dr. Jenner left it very much where it is now. The Board have been very active and solicitous as to pre-

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serving the lymph, but as to the mere operation of inserting of it, I think that is very much where Dr. Jenner left it.

482. Is there anything in the nature of the disease that you think the Board has been instrumental in bringing to light that was not known before?—No, I am not aware that there is; I think the experience is a little more correct, from the duration in which it has been practised; in the appearance of the vesicle and various other circumstances.

483. What is the period in your opinion within which lymph ought to be taken for vaccination?—If it is a question in reference merely to its efficacy, I should say any time after the lymph was formed, the earlier the better; but then there are reasons why the Vaccine Board have not recommended that.

484. If you take it too early you may prevent the disease from going through its complete course in the patient, may you not?—Yes, there is a suspicion of that; it is possible.

485. Therefore it is that the lymph is taken at a somewhat later period?—Yes, and it is more abundant at that period; therefore when the vesicle is opened, it furnishes a larger supply of lymph.

486. During what period do you think, combining those two circumstances together, the lymph ought to be taken?—I should think certainly not before the sixth day, or later than the eighth or ninth; that would depend very much upon the supervention of the areola.

487. On the average of cases?—I think the sixth, seventh or eighth days; the sixth would not produce quite so much lymph as the seventh day.

488. Are the demands for lymph very great?—Exceedingly great, beyond what I was at all aware of before I was in the Board.

489. Do they principally arise, as far as the Board is concerned, from the country practitioners, or from the London?—There is this difference with respect to the London, that the London practitioners often go to the vaccinators themselves, therefore the lymph is not brought to the house where the Board meets; the applications to the Board are chiefly from the country and various parts of the empire, and the colonies and the continent; to the colonies a vast deal is sent.

490. From the great demand that takes place for lymph, are you or are you not of opinion, that if the present Board were dissolved, by Government ceasing to make a grant, the very demand would cause another institution to be formed by subscriptions, for maintaining the supply of lymph, and supplying the practitioners throughout the country?—That is really so much a matter of public feeling, that I cannot speak with any confidence upon the question.

491. Is there not a prevailing opinion on the part of the whole body of medical practitioners throughout the country, that it is a matter of great importance to preserve the disease such as it now exists, without being again under the necessity of having recourse to the cow?—I think that is the impression generally, certainly.

492. Do you not think that if there were no Parliamentary grant, an institution would be kept alive by public subscription, for affording a constant supply of lymph?—If I am to draw my inferences from public institutions that have existed heretofore, I should doubt that very much; because I rather think they were not able to supply a large quantity. I allude to the Jennerian and the earlier institutions; but I speak with some diffidence on that point, because that was early on my entering into the profession.

493. Do you think there is any reason to doubt that if another society possessed the same funds that the Board has now the command of, and that such society persevered in a course similar to that which the Board has pursued, they could not carry on vaccination to the same extent, and supply practitioners with lymph to the same extent as the Board?—Except that our Board is more marked as to its influence, I could not speak, because I think the question very much turns upon the influence which the Board has over the public opinion. I think the Board, constituted as it is by the heads of the College of Physicians and of Surgeons, has that influence over the public and over the profession, that it must do more than any other constituted Board not possessing those influences.

494. Do you think it is of the same importance at present as it was in the early period of the history of vaccination, that there should be a Board having, as you describe the present Board to have, an influence and authority from the station that the members of it hold in the profession, and the object of that Board being, as you seem to represent, that they should endeavour to give importance to the practice of vaccination by the weight of their authority?—Precisely; I think the question

question almost divides itself into two parts: first of all in reference to the public generally, who are not professional; if it bears upon that point I think the influence of a body who may be in some way looked up to, would be almost as important, or even more important, than upon the earlier introduction of vaccination, inasmuch as the lower orders of people, those in the lower class of life, seem to have prejudices to overcome quite as much as they had in the earlier introduction. It is a notorious fact that a vast number of children are left quite unprotected by vaccination, and open therefore to small-pox through that cause; their prejudices are not overcome.

495. Are those prejudices of a character that you think the existence of a Board of men of authority in the profession is likely to overcome?—I think in some measure; but when that authority is received by them from Government, it is particularly likely to overcome them.

496. Do you not think that the very multiplied practice of the Board, from the period of its first institution to the present time, affords the best data for showing from actual experience what the value of vaccination really is as a preventive against small-pox?—To the particular fact I should say yes, certainly.

497. Do you think that from that practice any reasonable man, or any reasonable practitioner, can entertain any well-grounded doubts of the value of vaccination as a preventive?—Certainly not; I think all the better part of the profession cannot.

498. You think that the existing experience approaches so very close to certainty that the value of ten or twenty years additional experience could hardly increase that amount of certainty?—If the world were free from prejudice, certainly not; but those prejudices go on.

499. Do not you think that it would contribute most materially to remove any impressions unfavourable to vaccination, if the Board were to publish the whole result of its experience, from its institution down to the present time, stating as nearly as they can the total number of instances of vaccination, the total number of failures, meaning by failures, occurrences of small-pox subsequent to vaccination; and that such are the real grounds upon which the public ought to be convinced of the value of vaccination?—If the public is to be divided into two parts, the intelligent and such who are not intelligent, I should think, as far as the intelligent goes, it would be decisive; but then I am aware, seeing as I do a great part of the public, that the inferior orders of life would never possess that information, they would never seek it, and therefore their prejudices would continue.

500. In the long run, are not the least intelligent influenced by the intelligent?—That so very much depends upon the contact with which the two come together; but surgeon as I am to a large hospital, I know too well how far prejudices exist.

501. The degree of probability of the protection afforded by vaccination approaching now almost close to certainty, and consequently there being at present no foundation whatever for such prejudices, what probability is there that the continuance of the Board for a longer period would tend to remove those prejudices?—All I can reply to that is, that as the world is constituted, there are in the inferior class of life such prejudices still existing, that I think the authority of Government influence is still necessary.

502. All that experience can afford for removing prejudice has been already afforded; the influence of Government has continued for a period of years, and yet inoculation for small-pox still goes on to a certain extent. Why do you think that the continuation of the Board for several years longer is likely to remove those prejudices that the past continuance of the Board for several years has been unable to remove?—I still can only reply that, in the inferior class of life, prejudices are so strong that every influence is necessary to be continued to overcome them.

503. Do you think you are able to predict that 10 years hence, if the Board shall continue 10 years longer, without the positive interference of the Legislature by an Act prohibiting inoculation for small-pox, inoculation will cease to be practised?—No, I am not, because I know how many prejudices there are to overcome.

504. Do not your arguments go to this extent, that the Board shall be continued for an unlimited period?—I think there are circumstances certainly which that question involves, which would make me doubt fixing any limitation to it.

505. Is it to anything that is actually done by the Board in regulating the practice of vaccination, or to the weight of their character in giving a countenance to vaccination, that you attach the principal value and utility to the continuance

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of the Board?—With respect to the first part of the question, vaccination has now been prosecuted for so many years, that there is little to be done as to pointing out any improvement in the mode of its adoption. With respect to the second, decidedly I think that the exertions of the Board, but not merely confined to the Board, but the exertions of those individuals whom the Board chooses and appoints as vaccinators, who are and ought to be persons of influence in their districts, are spreading the influence.

506. Do you think that there being a Board to which belong the President of the College of Physicians, and the President of the College of Surgeons, and other medical men of character, is at all essential to give that authority to vaccination which you consider desirable. Would not the single circumstance of there being a Board or institution directly countenanced by Government, answer the same purpose and ends?—I think not.

507. State why not?—I think that not only it is an influence arising out of the position in which the heads of the two colleges stand, but also a very important influence arising out of their selecting persons to vaccinate both in London and in the country, who are men of intelligence and men of influence, and also men accomplished in their profession; men who understand the general principles of pathology, which would very probably not be the case in a Board otherwise constituted.

508. How are those persons you have spoken of, to whom the Board gives countenance, appointed?—They are appointed by the Board, with due consideration of their character and of their education.

509. How are they selected?—They are selected from our lists.

510. Is there any instance of a respectable country practitioner, who belongs to the College of Surgeons and to the Apothecaries Company, on applying for lymph, and requesting to be made a corresponding vaccinator, being refused the appointment which he requested to have?—With respect to the Apothecaries Company, I know nothing of that; with respect to the College of Surgeons, certainly not.

511. Do you recollect any respectable country practitioner being refused such appointment?—It is possible; I am not aware, since I have been in the Board, of such a refusal.

512. Do you not think that the very circumstance of a country practitioner being both a member of the College of Surgeons, and of the Apothecaries Company, affords a sufficient guarantee for the ability of the applicant to perform vaccination?—I consider being a member of the College of Surgeons certainly a guarantee, because it is a surgical operation.

513. You are aware that the Apothecaries Company are very much improved within the last few years, from the course of examination which they require of those to whom they grant their licence?—I am.

514. Do you think that that improved examination affords a sufficient guarantee to the Vaccine Board, that a member of the Apothecaries Company who is not a member of the College of Surgeons, will be able to perform vaccination in a regular manner?—I consider vaccination a branch of surgery, and therefore I should confine it to the College of Surgeons.

515. That being your opinion, can you state whether it has been the practice of the Vaccine Board to refuse to appoint as corresponding vaccinator any person who is a member of the Apothecaries Company only, and not a member of the College of Surgeons?—I should think it is possible that that would be done.

516. What has been the practice within your experience?—Within my experience the practice has always been to refer to our own list of the College of Surgeons, and depend upon that.

517. You mean to say, that the Board appoints as corresponding vaccinators exclusively members of the College of Surgeons?—I should think it does, very much so; since I have been in the Board, it has.

518. Has it exclusively?—I am not aware whether it has exclusively, but I know it always regards the list of our members.

519. You are of opinion therefore, that a general practitioner in the country, not a member of the College of Surgeons, has not adequate medical knowledge for performing the operation of vaccination?—I do not know whether he has or has not; but I know that the test of being a member of the College of Surgeons is the best test of his being able to perform surgical operations.

520. Do you not think that the circumstance of his being a medical practitioner in the country, in large practice, would alone be a sufficient guarantee for his performing

forming vaccination successfully, even although he be not a member of the College of Surgeons?—It might, but I should not have the test which I should have of the other.

521. Do you know anything of the character of the other institutions in this country, established for the promotion of vaccination?—I do not.

522. Do you know that there are such; that the Small-pox Hospital for many years has given up the practice of inoculation, and devotes no inconsiderable portion of its revenue to the promotion of vaccination; and that there is also the London Vaccine Institution?—I believe there are, but I know nothing of them.

523. Are frequent complaints addressed to the Board of the character of the lymph which they send, in respect of its efficacy?—Now and then there are complaints; I should not say there are many, in comparison with the quantity that is sent away; but of course that very much depends upon the way in which it is used; one practitioner will make that do which another does not.

524. Do you know whether many practitioners in the country are in the habit of receiving their lymph from those other institutions, and not from the Board?—I should think not; for I should think, from the great quantity sent into the country from the Board, the Board must supply the chief.

525. Do you know whether it is the practice of the Board to refuse lymph to druggists, and to grant it only to medical practitioners?—No, I do not think that question has come before me.

526. Do you recollect any applications having come from druggists to the Board for lymph, and the requests being either granted or refused?—No, I do not; it does not occur to me at present to recollect a case.

527. From your impression of what the usual practice of the Board is, do you think that such request would be granted, or that it would be refused?—I should think, that if there was evidence that it was *bonâ fide* for a practitioner in the country, that the druggist was merely the agent or the carrier, it would be granted, certainly.

528. Do you believe it to be the practice of medical practitioners in London to vaccinate gratis any poor who apply to them for that purpose?—I have no doubt of it, because there is so much medical business done gratis in London.

529. Do you think that the number of the medical officers constituting the Board, could be advantageously reduced below its present appointment, if it were thought proper to continue the Vaccine Board?—My opinion is, that the number had better be more than they are, inasmuch as it is a question so much of influence. Of that I was desirous, when the Secretary of State notified to us that he wished to reduce the sum granted, I stated that it would be better to continue the Board as it was, and to receive less; indeed, I would willingly give my attendance for nothing, sooner than the Board should be given up.

530. Then it is not for the actual influence that the medical officers of the Board have, as doing anything to keep alive the disease, but from the weight of character belonging to their station in the profession, that you wish such a Board, composed of medical men high in their profession, rather to be increased than to be diminished?—I think, both.

531. You stated in a former answer, that vaccination and its practice are now so well understood, that the medical officers can do very little, if anything, for advancing the practice?—What I mean by practice, is the mere insertion of the lymph. With respect to the variety that may appear, both in the form of the complaint and of the other complaints connected with it, still many facts are daily arising, and the Board are in possession of a vast number of facts; but then as they have no personal view, it is not like an individual who may publish accounts to get a character himself; they have no object of that sort; it is merely to do that which is best for the knowledge of the complaint.

532. The Board has now existed 23 years, and during that period have they, by any publications, made known the various anomalies accompanying or consequent upon the disease; and if they do not make known such facts to the world, of what use is that part of the medical facts of which they, as a Board, acquire the knowledge?—I am not aware that they have produced any publications, but from time to time, as various minutiæ in the improvement of practice have occurred, they have issued instructions to vaccinators, and that is to the profession, in fact.

533. What improvements in the actual mode of performing vaccination has the Board ever introduced; in your last answer you appear to refer to some improve-

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ment in the mode of performing the operation?—What I chiefly mean is, that their improvements have been mostly in the managing the lymph, and not in the mere operation of inserting it.

534. Describe in particular those improvements to which you allude?—The improvement of the managing of the glasses, and the way in which the points should be armed, and in the introduction of the tubes, and so on.

535. You believe those to have been improvements recommended by the Board; can you state that that has been the case, or that they have not been improvements adopted from other sources?—They may have originated in other scources, but certainly in the minute details, the Board I think have advanced the subject.

536. Were the processes not previously practised by the vaccinators of other institutions?—I believe the principle might have been, certainly; but I think the Board still have pointed out minute circumstances, which have rendered them more efficacious, particularly with respect to arming the points, capillary attraction is so apt to draw up the lymph from the point, and various other circumstances.

537. Do you believe the lymph furnished by the Board is more genuine than that furnished by the other institutions in London, that perform vaccination?—I cannot conceive that there is any degree of genuineness, that it is either genuine or not genuine; therefore, I presume all the others are right.

538. May not the lymph be taken at a later period, for instance, or may it not possibly be taken where there is some other cutaneous eruption of the same kind?—Yes, it may in the latter case be less genuine; but with respect to the lateness, it is known, that the crust will produce the disease, and very well, and there is no limitation in that respect.

539. Do you believe it is more or less efficacious than the lymph which is furnished by the other institutions?—No; certainly not.

540. May not the support of such an institution out of the Government funds, tend rather to relax the exertions of individuals, in supporting the practice of vaccination: is it not found, for instance, that with regard to institutions in support of charitable objects, the maintaining them out of the Government funds renders the public somewhat indifferent to their support by their own exertions?—I should think quite the reverse, if it applies to the influence over the prejudices of the inferior classes of society.

541. The question does not apply to the prejudices of the lowest classes, but the question applies to the exertions of those persons in the higher or middling classes, who are usually found ready to contribute in favour of charitable and other meritorious objects?—I cannot see that at all; for I think, in a case so clear, every well-ordered mind would try to promote vaccination, whether there was a Government institution or not.

542. Do you doubt, in the case of many other charitable objects, that such is the effect of supporting them from the Government funds?—I think it would not, where the prejudices of the lower class are to be contended with; this is so much a matter of prejudice; it is not whether people want to come, but whether it is necessary to induce them to come.

543. Referring to a former question, do you think that if the support of vaccination were to depend upon institutions, partly supported by endowment and partly supported by public subscriptions, such institutions for promoting vaccination would be able to support themselves?—I think that a Board or an institution formed partly from subscriptions, in a great measure would have one difficulty to contend with, inasmuch as the profession for the sake of getting the appointment, might become subscribers, and then a degree of relaxation obtain. It is better as it is, where there is a distinction between the vaccinators and those who appoint them; whereas there would not be in the other case.

544. Suppose that Government were to advance funds in aid of an institution on such terms as these, that for every two or three that was raised by subscriptions or by endowment, the Government would be ready to subscribe one; and they were to impose these terms, that the society should lose that grant in aid upon its failing to keep up a constant supply of lymph, and to afford the charges of lymph to all applicants?—That is so much a matter of experiment, that I could not form an opinion upon it.

545. Do you not think that in that case such institutions would have the strongest motive possible for continuing their exertions?—I think the institutions in their management might; but I think where there was an interference of subscription, that it might induce medical men, for the sake of getting the appointment, to become

come subscribers, and there would not be a distinction between those that are to supply the lymph, and the body administering the institution.

546. Do you know whether the Small-pox Institution, since it commenced vaccination, has been able to keep up a supply of lymph from its own resources only, without having recourse to the stations of the Board for a renewal of its supply?—I am not at all aware.

547. If the Board were broken up, would not all practitioners in the country who require a supply of lymph, be obliged to have recourse to some of those other vaccine institutions in London?—They must seek other directions, undoubtedly; but if their supply was not equal to the demand, the small-pox would gain great ground, and its ravages would be very considerable, for even now they complain very much indeed of the prevalence of small-pox and of inoculation.

548. Do you believe that the practice of inoculation extends to the regular class of practitioners, or that it is principally carried on by itinerant inoculators, who go about the country?—I should think principally by inferior orders; but I am sorry to say, that of late years practitioners have even adopted it in some places.

549. It being desirable to select lymph from a great number of cases, is it not desirable to concentrate large numbers at every vaccine establishment, for the purpose of obtaining the best lymph?—Yes.

550. Do you think that the stations of the Board in London are injudiciously multiplied?—No, I think if anything too sparing.

551. What do you think would be the fair remuneration to a medical practitioner in London for vaccinating during one hour in the day twice or thrice a week?—I think the bearing of the question depends very much upon the respectability of the man, because, in order to get a great number of patients to be vaccinated about him, the individual should possess influence in his neighbourhood, and also he must possess the proper qualities of being a well-educated man; and therefore under those circumstances I should think not less than 50 *l.*, and sometimes 100 *l.*, as not at all too much for a man of respectability.

552. Amongst what class do you think it most desirable that the stationary vaccinators should possess influence; among the higher, the middling classes, or the poorer?—The lower orders of tradesmen, and mechanics.

553. Do you not think that the parish practitioners in many of the larger parishes have very great influence amongst the lower classes and mechanics, and would be for that reason the most able to diffuse vaccination throughout their parishes?—No, I should think those had as little influence as any; I should think they are not looked up to in general by the poor.

554. Do you not think that the very high authority which would be given them by their being the officers of the parish, would tend very much to promote vaccination if they were appointed vaccinators?—I think that authority is not at all likely to excite that sort of influence that would induce the poorer classes voluntarily to bring their children to them.

555. Are they not likely, through the parish officers, to know more of all the families of the poor in the parish than any other class of practitioners which you would name?—I suppose they are, of the very poor; but it is of the inferior tradesmen, and mechanics in good situations that I speak.

556. Do you doubt that most intelligent practitioners might be found in London who would be ready to vaccinate one hour a day three times a week for the sum of 25 *l.* a-year?—I dare say many intelligent men would be, because our profession, as a whole, is a very poor profession, and its members often glad to get anything.

557. How do you account for the great difference there appears in the salary which is given by the Board to vaccinators at different stations; two 150 *l.* a year, two 100 *l.* a year, and the rest 50 *l.*?—I cannot account for it but from the number of subjects they vaccinate, and also from their long services. When the Board was originally instituted, I believe the allowance was greater than it has been of late years; the number of vaccinators was not so great originally, and the allowance was therefore greater. Of late years they have increased the number and decreased the allowance. Therefore that gentleman receiving 150 *l.* had it from the beginning, and it has been continued from that time; and the other two gentlemen who have 100 *l.* a year receive that on account of the great business they do. They are so fortunately situated in the neighbourhood, that they produce a vast deal of lymph.

558. None

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558. None of the members of the Board, the inspector excepted, are in the habit of visiting any of the vaccine patients, within your experience of the Board?—No, not in the habit, certainly.

559. On what principle is it that the vacancies are filled up of the stationary vaccinators?—It is chiefly upon the principle of the locality being good, or likely to produce a great number of applicants of the country or neighbourhood, and so on.

560. How are they recommended to the Board for appointment when a vacancy occurs?—It is, in general, an application by letter.

561. Are there not what are called extraordinary vaccinators, who are supposed to have priority of appointment, in preference to persons who have not been appointed extraordinary vaccinators?—Yes, there are; I am not aware that since I have been in the Board there has been any alteration, therefore I am not so ready to reply to these questions.

562. Are not the stationary vaccinators selected from what are called the extraordinary vaccinators?—I think there is a sort of understanding that they should have a preference, allowing that their qualifications are equal.

563. Who appoint the extraordinary vaccinators?—The Board.

564. Are they balloted for as extraordinary vaccinators?—I am not prepared to answer that question; I do not think a case has occurred since I have been in the Board.

565. Has there been any vacancy among the stationary vaccinators since you have been in the Board?—There was one in Jermyn-street, I think.

566. How was that filled up?—By a gentleman who applied, who had been in the habit of vaccinating, and had opportunities of getting a great deal of lymph.

567. Has the amount of the salary which the stationary vaccinators receive been under consideration, as to whether it might be reduced or not?—Not since I have been a member of the Board.

568. You said that you considered a prejudice still to exist against vaccination; do you not consider that that prejudice has rather increased than diminished of late years, in consequence of the instances of its failure from negligent or imperfect administration?—I think that prejudice has increased, from the occurrence of small-pox after vaccination; but whether from the inefficacy of vaccination, or whether from the peculiarity of the individual subject, I do not know.

569. Are you not of opinion that it may have been the case, in many instances, that failure of the vaccination has resulted from its apparent imperfect administration?—I should think it is possible; but from all the cases I have witnessed, I should think it chiefly arises from the peculiarity of the individual.

570. Can you state what per centage the number of cases of small-pox, after imperfect vaccination, forms to the whole number vaccinated?—I cannot.

571. Do you consider it to be a very small per centage?—Very small.

572. Are you of opinion that there are many who call themselves medical practitioners, that are still capable of bringing discredit upon the practice of vaccination either from design or ignorance?—Yes, I think that is possible.

573. Do you think there are individuals in the profession capable of injuring the character of vaccination from sinister motives?—If the word profession means those who are properly educated, I should say no; but ours is such an odd sort of profession, there are all degrees of it.

574. Persons who call themselves medical practitioners?—Yes, in country practice, persons without any pretensions.

575. Are there not many persons who profess to vaccinate who are not medical practitioners?—Yes, I think there are.

576. Have any complaints been made of the inefficacy of the matter sent by the Board, which appeared upon examination to be well founded, and not owing to its imperfect administration?—From what I have observed generally, it has been from the imperfect administration; because the lymph from the same individual has been sent to two persons, the one will succeed and the other not; therefore we cannot set it down as the fault of the lymph.

577. Did the Board ever make a calculation of the lymph transmitted by different stationery vaccinators, in order to ascertain whether the lymph transmitted by one vaccinator was more or less successful than the lymph transmitted by another, and in this way to ascertain whether there was any defect in the mode of arming the points transmitted by any particular vaccinator?—Not since I have been in the Board.

578. Do not you think that the uniform mode of practice recommended by the Board, has the effect of preventing the practice in general from deviating into irregularity, by which its effects might be impaired?—I think so.

579. Might not there be an impropriety in assigning the practice of vaccination to a Small-pox Hospital, from the infectious atmosphere that must be supposed to prevail there, and from the intermixture of persons?—I should say *primâ facie* it must be objectionable, the vaccination being carried on in the same place.

580. Do you not think that it might have the effect of producing some degree of uncertainty in the public mind in regard to the practice of vaccination, if it was known that the thing was transferred to the Small-pox Hospital; might not persons think that vaccination was abandoned, and that we were reverting to inoculation? —I certainly think that it would leave the minds of the inferior orders of society in a more undecided state, whether they should adopt the one or the other, either vaccination or inoculation.

581. Are you aware whether the lymph of certain trials made by Dr. Woodville, after discovery of vaccination, had not well nigh proved fatal to the cause, in consequence of their being made in the Small-pox Hospital?—I have some faint recollection of that circumstance, but it is very long back; it was when I was very early in the profession.

582. Circumstances of what kind?—That I do not know; it is all obscure in my mind.

583. Do you not consider it desirable that the persons who have the authority to appoint the vaccinators, should be of that station and character as to afford a public security for the competence of those vaccinators, and for their own sincerity and independence in the choice?—Decidedly; that is my opinion.

584. Would not that object be answered if stationary vaccinators were appointed by any single officer appointed by Government?—I think not; because I think the two heads of the colleges having the regulation of the two departments of the profession, have that influence in the profession which no others would.

585. As far as the practice of vaccination goes, putting aside the value of any influence immediately upon the public mind which the Board may have, could not the whole active part of vaccination, such as the Board now carries on, be carried on by a single medical individual, both keeping a register such as is now kept, and also inspecting the labours of the various stationary vaccinators?—That is a mere question of labour; I suppose he might; I do not know whether he could or not; perhaps he might.

586. Can you doubt it?—I think he would have a vast deal to do, from what I see going on at the Board.

587. He would have to conduct the correspondence, to enter such minutes as are now kept in the minute-book of the Board, and also to pay occasional visits to the stationary vaccinators. Are not those the duties which are now jointly performed by the registrar and inspector?—They are.

588. Is it not desirable that the persons who vaccinate, should have a practical knowledge of the disease of small-pox?—I think it is desirable.

589. When you say that there would be an objection to the Small-pox Hospital being made the principal institution for carrying on vaccination, does it follow that that institution should vaccinate exactly in that part of its establishment where the patients applying for vaccination would be exposed to the contagion of small-pox?—It does not, certainly; but still it would not get over many of the feelings of the mothers of children.

590. Would it not be necessary that there should be a communication of persons to a certain degree, if the same practitioners attend the small-pox and the vaccination patients?—Yes.

591. Is it not a matter almost of necessity, that those who are the constant vaccinators should have a knowledge of a great number of cases of small-pox, since those are the very individuals who, in case of small-pox occurring after vaccination, are employed to investigate the nature and history of such cases?—I think it is desirable that they should know small-pox, but unfortunately small-pox is so very impressive a disease, that those who have seen a very few cases know it, and understand it well.

592. Does not the Board at this very time, if cases of small-pox occur after vaccination, direct their own stationary vaccinators to visit their patients which are subjected in this manner to small-pox?—I am not aware whether cases have occurred of that sort after vaccination.

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593. It is stated in a return to Parliament, that the duty of the present inspector is to receive and distribute lymph to all applicants at home and abroad, and to investigate all anomalous cases as pointed out to him by the Board, or reported by the vaccinators. It appears therefore that it is the duty both of the inspectors and the vaccinators to inspect and report anomalous cases, and amongst those anomalous cases are to be included cases of small-pox occurring after vaccination?—Yes.

594. Therefore, as the Board and its establishment of vaccinators are now constituted, does it not happen that those who vaccinate, are very frequently in the habit of visiting cases of small-pox?—It does happen sometimes, but not very frequently; because it is a very rare occurrence that small-pox does happen after vaccination.

595. Do not cases frequently occur of the infection of small-pox having been taken either during or preceding the period when the patient has been vaccinated?—It now and then occurs.

596. Therefore the vaccinators frequently do actually come into contact with patients labouring under small-pox?—I think they do sometimes, but not frequently.

597. In a former question you were asked whether many practitioners were not liable to the imputation of design or ignorance; would not this be a cause in constant operation at all periods and at all times; would not individuals be found to whom that imputation would be as much appropriate as it is at the present moment?—I am afraid so.

598. Do the country practitioners find any difficulty in obtaining the supplies of lymph which they ask from the Board?—None.

599. Have any other of the institutions in the town the like privilege of furnishing matter under the Secretary of State's cover?—I think not, but I know nothing of the other institutions.

600. Is there any pledge required from poor persons bringing their children to be vaccinated at the institution that they shall bring them again to be investigated on the seventh, eighth or ninth day?—Yes.

601. Is there a deposit of money, or merely a verbal pledge, when a poor person brings her child to be vaccinated?—There is no deposit of money.

602. Would not such deposit deter the patients from bringing their children?—Yes, the feelings of the public are too delicate to admit of that.

603. Do you find that those persons generally keep their pledges?—I think they generally do; some idle mothers may not.

Robert Keate, Esq. called in; and Examined.

Robert Keate, Esq.

604. WHEN was it that you were President of the College of Surgeons?—From July 1831 to July 1832.

605. And *virtute officii* you were a member of the Vaccine Board?—I was.

606. What is your opinion as to the expediency of having a Board composed of medical men who stand high in their profession, for the purpose of superintending vaccination?—My opinion is, that it is extremely expedient that there should be some such patronage given by the highest official characters in the medical profession, in order to encourage vaccination, and to uphold it both as a national object and as an object of humanity; and I may say that I am guided in that opinion by the fact, that at the very period of vaccination being introduced, it was attempted to be supported by two or three private establishments, and that it never was so supported, and never was so propagated as it has been since the establishment of the National Board.

607. If it was less supported at a period shortly subsequent to its first discovery by Dr. Jenner, and has been followed much more extensively at a later period, are not those circumstance which might be expected to occur in the history of a discovery so very novel?—I think that, generally speaking, it is so; but in this particular instance I think that I may say there were greater exertions made in the beginning by a vast number of private individuals, as well as private bodies, to encourage the process of vaccination, than in almost any new discovery that was ever made; and that the exertions of the individuals did not do what was required, at least did not forward the process so much as might have been expected; and then as the exertions of individuals decreased, I think I may say that that was one of the great reasons why it was considered by medical men to be a national object to keep it up. It was going on in other countries to a much greater extent than in this. Since Government took it up and put it under the management and patron-

age

age and encouragement of the heads of the profession, I think it has very much increased, as far as my knowledge goes; and the exertions of private individuals and private societies were dwindling away before that period, as I have been led to believe.

608. What private associations or private societies do you refer to?—I refer to one that was under the direction of Dr. Jenner; another that was under the direction of Dr. Walker; and another that I assisted to establish so long ago as 1799, in Broad-street, Golden-square.

609. Are you aware that the Jennerian society was dissolved in consequence of dissentions, rather than from want of funds?—No, I am not aware of that circumstance.

610. Did not the Broad-street Institution, to which you refer, exist for a period of 26 years?—I believe it did.

611. It was principally maintained by medical men, at least that was its original design, for the purpose of investigating the nature of the disease?—Yes.

612. Was it not carried on for a period of nearly 26 years, with funds upon the average somewhat under 200 *l.* a year?—I am not aware of the funds; I belonged to it for about 10 years, I think.

613. Did it fully answer its purpose, as far as it afforded to the medical men who belonged to it the opportunity of investigating the nature of the disease?—I should think just so far; but it did not answer the views of those who wished to disseminate it.

614. Was it an object sought after, to disseminate it?—Yes; I always understood that the great object was to inculcate the value and expediency of the practice.

615. Was it not rather to afford to medical men the opportunity of investigating the nature of the disease?—The opportunity of investigation was the primary object; but I conceive that the two were combined, and I may add were inseparable.

616. The diffusing it to a certain extent was a necessary consequence of the desire to investigate its nature?—Of course.

617. Do you know whether that institution, during its continuance, was able from its own resources alone, to keep up a supply of lymph?—I do not know anything of it for the last 16 years, if it has continued for 26 years.

618. What do you consider to be the present immediate object of the Vaccine Board?—To keep up the supply of the authentic disease, to give encouragement to the medical men to practice that which they see is adopted by the highest and most influential characters in the profession, and to have a source and a nucleus from which not only the whole kingdom, but the whole of the world can be supplied.

619. Does the mode of practice by the operators of the Board differ in any way from that which is adopted by other vaccine institutions?—I do not exactly know what practice is adopted by other institutions. The directions of the Board seem to me to be those that are generally followed by medical practitioners at large.

620. Has the Board itself introduced any improvements in the mode of practice?—As I was only a temporary member of the Board, I cannot positively say, because the present plan was introduced before I became a member of it; and I think their plan has been generally followed by practitioners in private life.

621. Is there not great uniformity of practice generally in all the institutions whose object it is to promote vaccination, and amongst all the practitioners throughout the country?—I should suppose so.

622. Do they materially deviate from the original practice introduced by Dr. Jenner?—I should say not materially.

623. Do you think that the weight and authority of a Board, composed of high medical officers, is so necessary at present, after a long and successful experience of 23 years, as it was at the period of the first institution of the Board, when the public mind, including even intelligent men, was somewhat unsettled upon the subject of vaccination as a preventive of small-pox?—Recalling the numerous letters that were received by the Vaccine Board at the time that I had the honour to be a member of it, from practitioners in the country, when there was a report that the Board was going to be abolished, I should say that it would have a very great and a very fearful influence upon them. The number of the practitioners in the country from whom we received letters was very great; I recollect letters from Ireland also: and they stated the impossibility to keep up the supply without some such establishment.

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624. The question did not refer so much to the supply as to the influence and authority given by a Board composed of high medical officers to the practice of vaccination?—I should say that the practice of vaccination is so well established now, that the anxiety of medical men generally would be to keep it up, whether there was a Board or not.

625. Do you doubt, from the great demand that there is for lymph, and as you state the great anxiety of the whole body of intelligent practitioners to keep it up, that even if the Government were to withdraw its grant, an institution would be formed, countenanced by the whole body of intelligent practitioners, for the purpose of keeping alive the authentic form of the disease?—I should doubt very much whether any society of private individuals would be able to do so; and I doubt it from the statements that have been made from different places, from not only the metropolis, but other places, and other countries indeed, of the impossibility; and there is a greater anxiety on this point on the part of foreign nations, than there is in this country.

626. Putting aside the societies in the country, and admitting that the proper place to keep it up is in the centre of a great metropolis, do you doubt that institutions would be formed in London capable of keeping the disease alive?—I cannot doubt that such institutions might be formed in London, capable of keeping the disease alive; but I doubt whether they would be formed.

627. Do you know whether existing institutions, the Small-pox Hospital and the London Vaccine Institution, have been able for a long period of years, without having recourse to any foreign source, to keep alive the disease by their own practice of vaccination?—I have not any actual knowledge of it; but I do not doubt the possibility of it in such a place as London.

628. Did you not say that you considered vaccination was more practised in foreign countries than it was in England, at the period of the first institution of the Vaccine Board?—I really do think so.

629. Was it not by direct legislative prohibition of inoculation that vaccination was so much promoted in foreign countries?—I believe it was by the governments taking it up there, and legislating either in favour of it or against inoculation.

630. Do you know that in a report on vaccination in Sweden, which was laid by the present Vaccine Board before Parliament, it does not appear that the Swedish Government directly interfered, any further than by appointing all the ministers in the different parishes to become themselves vaccinators, and by also appointing in every department of Sweden a government vaccinator?—I recollect some such report; but that was before my being a member of the Board.

631. You consider that the private institutions for the purpose of vaccination, at the period of the institution of this public establishment, were in a languishing and hopeless condition?—In a languishing condition; that has been always the impression on my mind.

632. Languishing, in respect to what?—In respect to the number of patients that came there: the number of patients was lessening.

633. Were they languishing in respect of funds?—I do not know as to funds; but I understood they were not enabled to supply the quantity of lymph that was required, and that the aggregate number of patients vaccinated was becoming much less than formerly.

634. Would not the quantity of lymph that they were able to supply depend in a great measure upon the number of individuals who were willing to have their children vaccinated; and if at that time there was no general opinion in favour of vaccination, would not that also cause a difficulty in maintaining a supply of lymph?—No doubt.

635. Was the expediency of the practice pretty well established at that period?—In the opinion of almost all medical men.

636. What is your opinion with regard to the propriety of assigning the practice of vaccination to a small-pox hospital?—I should say that it would lead to many mistakes, and it would be impossible to keep up the knowledge of the genuine vaccine disease; because we know that in two cases out of twenty, you vaccinate and re-vaccinate, and the patient does not take the disease from some accidental circumstance or other. If the patient were vaccinated in a small-pox hospital and took the vaccination, it would be secured from the variolous affection; but, if the vaccination failed, the patient would take the variolous infection almost as a matter of course.

637. Can

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637. Can you state from the practice of vaccination at the Small-pox Hospital, that those difficulties which you mention have actually occurred?—I cannot state that; but I know that a private practitioner has gone from a case of small-pox to vaccinate another patient, in order to produce a security; that vaccination did not succeed, it was not taken by the patient, and he took the small-pox infection from the contact of the person who came to vaccinate him; and that must occur, I conceive, in many such instances.

638. You consider it to be important, therefore, that the two diseases should be kept distinct?—I should think so, most certainly.

639. Will not the vaccinators almost as a matter of course, in the course of their practice fall in with many small-pox cases?—Yes.

640. And is it not even desirable that they should have a thorough knowledge of the disease of small-pox?—As long as the disease of small-pox exists in the country it is.

Dr. *Thomas Hume*, called in; and Examined.

Dr. *Thos. Hume.*

641. YOU are a member of the National Vaccine Board, as Senior Censor of the College of Physicians?—I am.

642. Are the censors of the College of Physicians appointed annually?—Annually elected.

643. Are they re-elected?—No; in my own case a re-election took place under the following circumstances last year: there is a branch in the College of Physicians called Elects; I had the honour to be appointed one in that year, which rendered me re-eligible to the office of senior censor.

644. Shall you be re-eligible to that situation next year?—No.

645. Are there any special duties that devolve upon you as member of the Vaccine Board, or do you merely sit there as member of the General Board?—I sit there as one of the three, and I have always attended, fearing there might not be a quorum; but there has never been absent more than one of the three. The Board is composed of the President of the College of Physicians, the President of the College of Surgeons, and the senior censor of the College of Physicians.

646. How many are sufficient to constitute a quorum of the Board?—I should say one, but it never did come to that; we have never had under two, and often three; but at the same time I imagine that one under the new constitution of the Board would be sufficient.

647. What do you consider to be the principal object of the Board, as now constituted?—To take a constant review of the transactions of the society; to hear and to form opinions upon letters of a special character; if anomalies arise, to give the best judgment towards the solution of them. The duties on our day of meeting are these, there is a selection from about 40 letters made by the registrar on his own judgment, as being those most deserving our notice; they are read, and we give our opinions upon them.

648. Has the result of the experience of the Board upon all those anomalous cases, ever been laid before the public?—Not by the Board; but various publications, I believe, constantly obtain these anomalous cases.

649. Some advantage has been attached to the appointment of a Board from the weight and authority that belongs to it; are not the publications of the experience of the Board deprived of that value which would attach to their authority by not publishing them in the name of the Board?—I would answer this question by stating that such cases get so rapidly before the public, that it would be almost superfluous for the Board to report them. I would take the liberty to illustrate this: our college was in the habit of publishing its proceedings, but since we have had periodical conversations upon medical subjects, we find that it is utterly impossible to make the facts known to the public, as they invariably get into circulation beforehand, and obtain notoriety.

650. Has the Board in its possession a register sufficiently correct, of all the different cases of vaccination that come under its cognizance, to state the proportional number of cases of small-pox or of chicken-pox that occur after regular vaccination?—Certainly; but diffused through the registrar's correspondence, according to my knowledge.

651. Are you acquainted with other vaccine institutions?—I have not the least knowledge of them, except this, that applications have been made to us for lymph, for a remuneration; it was said it was refused; but in other words, I found that

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there was somebody supplying lymph upon pecuniary remuneration, which is not the case with us, of course.

652. Do you believe that those institutions make a charge for every supply of lymph, or do you believe that practitioners applying for lymph are generally annual subscribers to such institutions?—I have this in my recollection, that I was in Mr. Keate's attendance last year, when an application of so extraordinary a nature was made, that he said he would mention it to His Majesty; he happened to have the honour to be in his attendance. There was a great remuneration offered by the person demanding it. There was a complete understanding that remuneration was to be the *sine qua non.*

653. What was the remuneration?—I do not know. With regard to the efficacy of vaccine, if I may be allowed to make an observation: ten years ago, when I had the honour of being a member of the Board, a solicitor, with several children, of very respectable character and talent, requested I would call at his house to see a child of his recovering from a very mild small-pox. I went, and he told me beforehand that all his children had been vaccinated, that this child got the small-pox accidentally, that the other six remained in the nursery and playing about, and none of them were affected; and he said that it gave him more satisfaction than any other fact which had happened to himself, as he said there must be that in their constitution which nothing could baffle.

654. Do you think, as far as the knowledge of the anomalous cases goes, that the activity of practitioners, and the publicity that is given now through the various channels of communication to medical practice, would be sufficient to make known to the public the history of all those anomalous cases without the existence of such a Board as that of the Vaccine Board; particularly as you state that the Vaccine Board gives the knowledge of all those anomalous cases to the public through various unauthenticated channels?—I am satisfied that the anomalies that have appeared are sufficiently grounded in the mind of the public; but anomalies are occurring every six months, and a very curious one has occurred lately of a lady dying of the secondary small-pox. The public have not got the precise details of such cases, but they are notorious.

655. Do they not appear in the various medical journals, or publications, as reported by different medical practitioners?—They do; but when they transpire through us, they are registered, and if a reference were made to the authentication that would be stronger than a popular report.

656. Do you consider that popular report as well authenticated which a regular medical practitioner originates by an article signed by his own name, inserted in a journal of good character, or in a printed tract bearing his name?—I do not consider that the medical character of a fact is substantiated in such cases; and, generally speaking, the writers do not put their names to any cases but those that come under their own cognizance, and many gross mis-statements must occur in those cases, and must remain uncorrected.

657. The authority appertaining to the Vaccine Board has not hitherto been able to prevent the practice to a great extent of inoculation; do you conceive that the continuance of the Vaccine Board during the 10 succeeding years is more likely to prevent the practice of inoculation than has hitherto been the case?—I consider that the practice of inoculation is by no means general; and I further consider that it has been extremely reduced by the establishment of the Board. One prosecution took place within my knowledge; I think the name was Vant *v.* Dallows. We published in very large placards the case, and the injury that society sustained from it, and the liability to prosecution; and these were distributed throughout England, and pasted on various parish doors, within my own knowledge.

658. Is it rather to the enforcement of the law, and to the knowledge of public prosecution against individuals for carrying about in the open air a small-pox patient, that you look to putting down inoculation, than to the weight and authority of having a Board composed of high medical officers established for promoting vaccination?—To both circumstances.

659. Has there been any recent case of prosecution against individuals for that infraction of the law?—No breach of the law has reached us during several years.

660. Do you not think that the most successful mode of putting down inoculation for small-pox, is the communicating to the world the result of many years most successful practice of vaccination in preventing small-pox?—Certainly.

661. That

661. That is the real and solid ground upon which you must always rest for preventing the renewal of inoculation, and for promoting vaccination?—Certainly.

662. Is not, in fact, the principal object of the Board at present to keep alive the authentic form of the disease, and to be able thence to diffuse vaccination and lymph throughout the British empire and the world?—Decidedly; and very successfully the Board has done so; 98,000 points, charged with lymph, were distributed in the course of last year.

663. Are you aware that a very small portion of the funds of the society is at present, exclusive of the salaries to officers and house-rent, applied to the active part of the duties of the Board. It appears that out of the grant of 2,200 *l.*, putting aside the salaries and house-rent, 283 *l.* is sufficient for the contingent expenses of the Board?—I am not aware.

664. If that be correct, would not a small sum, given to any other vaccine society in aid of its existing funds, be sufficient to keep alive the authentic form of the disease, and to distribute to applicants the charges of lymph?—I do not think any society, relying on contingent subscription, could be permanent. I attended a society last Saturday, the St. Patrick's Charitable Institution, where 500 children are clothed and educated, and there was 300 *l.* increase of one year upon the former, 900 *l.* in one year and 1,200 *l.* in the other; and the munificence of the Royal Family always held it up; but during my knowledge of it, it was all but broken up.

665. You say you know nothing of the funds of other institutions?—No, nor of the institutions.

666. Do you consider it necessary, for continuing the active practice of vaccination, that there should be as many chief officers and members of the Board as at present?—I understand the Board is now composed of three members. I do not call the registrar one of the body, nor yet the inspector; certainly they have no voice, and they are not of the Board. The controlling power of the Board is solely vested in three members, and those receiving a salary of 300 *l.* a year.

667. Do you not think that the offices of registrar and inspector might be consolidated?—I am not aware that they could.

668. Are the duties such as might be performed by one individual?—I know more of the duties of the registrar than of the inspector, and I would say that his are very considerable. He receives 40 letters a fortnight at least, on the average, and he has to answer some with a good deal of effort, and others are commonplace. I have seen him receive in one day 30 letters; but I would say generally that he receives 40 a fortnight.

669. The number of those letters will appear in the minute-book of the Board, will they not?—Yes.

670. And from thence may be collected the number of letters of importance which require to be answered?—Certainly; the average of the letters produced to us may be eight.

671. What do you think of the salaries at present given to the stationary vaccinators?—I think, considering the great respectability of the men who receive 150 *l.* a year, that it is more in kindness on their part continuing at that, it is not remuneration to those individuals; and of the three receiving 100 *l.* a year, I think they are almost meritorious.

672. Is it a remuneration for past services, rather than a remuneration for present duties?—For the abuse of their professional time, or their loss of time.

673. Do you consider that there might not be an impropriety in assigning the practice of vaccination to a small-pox hospital?—I think there would be a great impropriety, and a prejudice well-founded in the public mind against it, not to be borne away.

674. In what would the impropriety consist?—In the liability of exposing to infection those who had not sufficiently taken vaccination.

675. Do you know what the practice of the vaccination at the Small-pox Hospital has been; whether it has been liable to those evils which you anticipate?—I answered the former question in the abstract; I have no particular knowledge of the practice in the Small-pox Hospital.

676. Are you not aware that the stationary vaccinators do, in the course of their duty, repeatedly visit cases of small-pox occurring after vaccination?—The cases occurring after vaccination are now incredibly small, considering how life is exposed to varieties.

677. Do

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677. Do not persons repeatedly, where a case of small-pox breaks out in a family, wish to vaccinate the other persons in that family, for the purpose of protecting them from small-pox?—Yes, certainly.

678. Therefore the stationary vaccinators at present come frequently in contact with cases of small-pox?—They come in contact with cases of small-pox, but not very frequently; I suppose six or seven cases may occur to our Board throughout the year.

679. Do you mean to say that such visits as are contemplated in the last question, are very frequent on the part of the vaccinators?—They are as constant as the demand can make them; I know not how frequently.

680. Do you know that the number of deaths by the bills of mortality from small-pox, is now between 700 and 800 a year?—The bills of mortality take a much greater range than the limits of the stations are supposed to embrace.

681. Are you aware that there is about that number of deaths?—I am.

682. Is not a vaccinator who does his duty with activity, not unfrequently obliged to come into contact with families where small-pox exists?—Certainly.

Dr. *Thomas Turner*, called in; and Examined.

Dr. *Thomas Turner.*

683. YOU are the Treasurer of the Vaccine Board?—I am.

684. As treasurer you receive a salary of 25 *l.* a year?—I do.

685. Have you produced the accounts that were ordered by this Committee?—I have brought a book, I believe, from the year 1816; I have no means of furnishing it previously to that period; but I take for granted that at the establishment there is an account previous to that.

686. Does the amount of the salaries at all come under your department?—I pay them.

687. It does not fall within your province to judge of the propriety of giving that amount of salary to each officer?—Not at all; I would take the liberty to speak to one point mentioned in the preceding evidence: there are two practitioners who still hold 100 *l.* a year, and the rest have only 50 *l.*, except Mr. Carpue and Mr. Gillam, who have 150 *l.* There were, I recollect, when I was first treasurer, four persons who had 100 *l.* a year, and when they died or resigned their situation in consequence of the grant being diminished, their salaries were diminished to 50 *l.* a year instead of 100 *l.*

688. As treasurer, do you attend all the meetings of the Board?—No, I do not attend all meetings of the Board.

689. Have you a voice at the Board?—No; I have been a member of the Board occasionally, before I was treasurer, and since.

690. What are the duties of your office besides keeping the account?—I have to pay all the bills; to look over the accounts and see that they are correct.

691. Are you appointed by the Board?—I was appointed by the Board,

692. Is it an appointment from year to year, or do you consider it permanent?—I have considered it permanent as long as I hold it; I should be very glad to give it up to anybody else.

693. How long have you held the office?—For 11 years; it has been generally held by the Treasurer of the College of Physicians, and I, as Treasurer of the College of Physicians, have therefore held it.

J. C. Carpue, Esq. called in; and Examined.

J. C. Carpue, Esq.

694. ARE you Vaccinator at the principal station of the Vaccine Board?—Yes.

695. The station of the Vaccine Board being at No. 8, Russell-place, Bedford-square?—Yes.

696. How often do you attend in the week?—Every day, Sunday excepted.

697. For how many hours in a day?—Always an hour; sometimes more, from 10 to 11.

698. Do you believe that that hour is a convenient hour for the poorer classes of patients, of whom it is presumed those who frequent the central station mostly consist?—Yes; the most convenient hour; but our patients are not among the poorer classes alone.

699. Who are they?—Tradespeople, and others of the highest respectability.

700. Is there any peculiar mode of vaccination which you perform, or do you believe

believe it to be in practice, as well at the stations of the Board as at the other institutions for promoting vaccination?—I make a puncture with this instrument [*a stilet*] which I believe is not generally used in England. I avoid making the arm bleed, as I found from an experience of 30 years in my dissecting room, that my pupils and myself, when wounded by a hook or a sharp pointed instrument, were frequently infected; if the wound was inflicted by a knife and the part bled freely, infection was seldom the consequence.

701. Was Dr. Jenner's mode by points?—I do not know.

702. Is this the mode which you, as a medical practitioner, think it most judicious to follow?—Yes.

703. Do you see many cases of small-pox?—Very seldom now. I did.

704. Have you in the course of many years practice seen many cases of small-pox?—Yes; I was in the habit of attending the Small-pox Hospital with Dr. Woodville. At this period Dr. Pearson founded the first Vaccine Institution; a subscription was entered into, which was supported by Mr. Keate, the surgeon-general, Sir Joseph Banks, Mr. R. Keate, myself, and many other gentlemen.

705. Was it from the same cow that Dr. Woodville renewed the disease?—Yes; we acted together.

706. Was not the Broad-street Institution instituted by medical men, principally with a view of themselves investigating into the nature of the disease?—It was instituted for propagating the disease, principally because Dr. Jenner had no opportunity; it was taken up by Dr. Pearson; Dr. Pearson was very enthusiastic; vaccination would never have been in general practice, but for the great exertions of Dr. Pearson.

707. You consider that vaccination in London would not have been in practice but for Dr. Pearson, and for the exertions of the Broad-street Institution, to which you refer?—Yes.

708. Was not that instituted in 1808 or 1809?—It must have been about that time, because, I was ordered by the Commander-in-chief to proceed to Colchester, to introduce vaccination in the army, in the year 1800.

709. It was not dissolved till 1826?—No; I subscribed to it till the last.

710. What circumstances do you think occasioned its being dissolved?—Want of money; it was exceedingly poor; the subscriptions fell off, and we could not keep it up.

711. Was it not the case, that for a long series of years, the amount of subscriptions was rather under than above 200 *l.* a year?—I do not know the money produced by the sale of lymph, but I believe the sale of the lymph contributed much to the support of the institution.

712. Did not several of the public establishments of the country, the Board of Ordnance, for instance, subscribe to that institution, in return for the lymph with which they were supplied?—Yes; also the army and navy.

713. Were the greater part of the subscribers men who were more or less medical practitioners?—No; the public generally; it fell off so much that we could not go on of ourselves.

714. Was vaccination practised at that institution?—Yes.

715. Was there a charge made?—No.

716. Was anybody allowed to be vaccinated, without any recommendation?—Anybody might be vaccinated.

717. Do you believe, that with a small addition to your subscription, you would have been able, at that institution, to keep up a continual supply of lymph?—Certainly not; we wanted more institutions. That was the reason we applied to Mr. Rose to form an institution paid by Government.

718. During the 26 years for which the Broad-street Institution continued, did they keep up their own independent supply of lymph?—Yes.

719. You have stated that the funds of the institution never at any time much exceeded 200 *l.* a year?—I think they must have had more, for we bought money in the funds; our first establishment was in Warwick-street, we then removed to Golden-square, and then bought the lease of a house in Broad-street, but when our establishment failed, and the Jennerian Society broke up, we applied to Parliament to allow us to found an institution, to employ more vaccinators; we considered that we could not go on. I was one that waited upon Mr. Rose upon the subject.

720. Do you believe that whatever may have been the amount of funded property you may at one time have possessed, that your annual expenses at any time much exceeded 200 *l.* a year?—I do not know.

J. C. Carpue, Esq.

20 March 1833.

721. Do you assist at all Mr. Simpson in the duties performed by him as inspector; do you ever visit the other stations?—Never.

722. Your duties are solely confined to attending every day in the week, except Sunday, for one hour in the day, to vaccinate patients?—Yes.

723. And to provide the charges of lymph?—Yes.

724. Does the making charges of lymph occupy many hours in the day?—No, I generally find an hour sufficient for that purpose, but on particular occasions it employs an hour and a half.

725. Do you believe that for keeping alive, in the metropolis, perpetually, the authentic form of the disease, and distributing lymph to applicants, so large an establishment as the present Vaccine Board is necessary?—I think the keeping alive the disease depends upon the vaccinators entirely; and I think now it will be lost sometime in spite of the number, because in very cold weather it is very difficult to keep it alive.

726. For what reason is it more difficult to keep it alive in winter than in summer?—It will not take so well in winter as in summer, and there are not so many applicants.

727. Have they been obliged to have recourse to other means in any cases?—It has never been quite lost, but it was almost lost by me, and I could not get the vaccine lymph; at last I applied to Mr. Lane in Guildford-street, one of our vaccinators, who had vaccinated a child in Pentonville; from this patient I procured most excellent lymph.

728. Does that supply merely relate to your own individual supply, or to the supply of all the stations in London?—I went to many other stations of the Vaccine Board and could not get any lymph.

729. You do not believe that the number of stations in London is at all excessive for the purpose of keeping alive the disease?—By no means.

730. What do you consider, if the establishment of stationary vaccinators were to be organized anew, would be a fair remuneration to a vaccinator who attends twice a week, and one hour every day that he attends?—I do not consider that I am paid; I say that I am greatly underpaid; and I do it as a matter of courtesy to forward vaccination. For a man to give up an hour a day for 10*s.* is quite ridiculous; and those men who vaccinate must lose very considerably if they are not paid a guinea a day for the hour.

731. You do not think 150*l.* a year too much?—I think it is very little.

732. In what way do the superior officers of the Board actually interfere to regulate your practice?—I receive no particular interference. If we have any particular case we report it, and we have sometimes met; but lately there is nothing of the kind. I never hear of a case of small-pox after vaccination; it is a very rare thing.

733. Do you conceive that any great benefit results to the promotion of vaccination, or to the keeping up the supply of lymph, from there being those superior officers of the College of Physicians and of the College of Surgeons, to superintend the labours of the vaccinators?—I do not suppose that their attending can be the means of keeping up the supply of lymph, for they have nothing to do with the supply of lymph. Mr. Simpson attends to see that the vaccinators do their duty, and I dare say he finds that the vaccinators do their duty, but it depends upon them.

734. Do you not think that one professional man, having a general knowledge of medical practice, would be sufficient to control the duties of all the vaccinators, and to keep a registry of the number vaccinated, and of the anomalous cases that may be reported to him by the stationary vaccinators as occurring during or after vaccination?—I cannot answer that question; I do not know what they do. I was never at the Board, and I cannot say that I know the duties. When I was a member of the Board at Broad-street, having to investigate this as a new disease, at first we had a great deal to do, but afterwards we did not attend so frequently.

735. You think that everything as regards the practice of vaccination is now understood, and that the Board composed of superior medical officers can do but little, and actually do but little, in order to regulate and improve the practice?—I mean to say that they cannot instruct experienced vaccinators, or those who have had great experience; they know full well what to do and what not to do.

736. Do you believe that you, as a practical vaccinator, are more able to judge what should be done and what should not be done in the practice of vaccination, than even gentlemen of the highest medical profession, who have not had so much experience in such cases?—I do, except two gentlemen who have been examined

before this Committee, Mr. Keate and Mr. Vincent, who were vaccinators; but if they had not been vaccinators, I should not think they would be so competent to give an opinion as myself; they understand the practice.

737. A person must have seen the disease, and must have seen the various forms of the disease, when other cutaneous disorders accompany vaccination, in order to form a just opinion of the various forms of the disease?—Certainly, without practice it is impossible.

738. Do you think the authority attaching to the Board, as being composed of men high in their profession, contributes at present very much to the spreading of vaccination, and removing the prejudices against it?—No, I do not know that it does altogether, but I think it has been the case.

739. You think that in the first history of the disease, and at the period when the Board was first instituted, that their weight and authority might be of use; do you think it is of use at present?—Some use, but not so much as it was.

740. Do you anticipate any material diminution in the practice of vaccination in London, if conducted by the stationary vaccinators, with one medical competent officer to superintend them, if the other superior medical officers of the Board were done away with?—I think it would make no difference with regard to vaccination.

741. Do you think it would make any difference with regard to the practice of all the intelligent medical practitioners throughout the country, in the vaccinating practice?—I should think it might, throughout the country, because they would pay attention to those men of high character.

742. Do not you think that if the whole result of the experience of the Vaccine Board, during the 23 years for which it has continued, were made public, showing in how small a proportion of cases small-pox has occurred after vaccination, and where it has occurred in how very small a number of cases indeed it has been fatal; such publication would do all that is possible for giving to the public confidence in the practice of vaccination?—I do not know that it would do all that is possible, but I think it would do a great deal.

743. Do you know any considerable number of practitioners in the country who entertain doubts of the success of the practice of vaccination; and if the publication of the result of the experience of the Board is not likely to remove any existing prejudices that they have, do you think that their minds are such as are likely by reasonable grounds to have those prejudices removed?—I am afraid not.

744. Therefore, could any additional number of years of equally successful practice to the 23 years past, be likely to remove from such minds such prejudices?—No.

745. Do you know anything of other institutions now existing for promoting vaccination?—No, I know nothing of the Small-pox Hospital; but I was in an omnibus and saw a child come in with an arm bleeding, as if they had been bleeding the child; it shocked me, and everybody in the omnibus; that seems to be a horrible practice they have of bleeding the children in vaccination.

746. How do you know the child had been vaccinated?—I asked what was the matter with the child, and the mother said it had been vaccinated.

747. Do you believe that the child of whom you speak had been vaccinated in the usual manner at the Small-pox Hospital?—I believe it had; it is their method of vaccinating, I am told.

748. Do you only know it from being told?—Yes; I was passing by the hospital, and the child was coming from the hospital.

749. Have you any doubt of the authentic disease being kept alive if the Government were to afford the means for maintaining a sufficient number of practical stationary vaccinators, without having so large a staff of superior medical officers as now belong to the Vaccine Board?—Yes, I think it might be kept up without having so large a staff.

750. Do you report to Mr. Vincent himself any anomalous cases that occur at the central station?—No, we report to Mr. Simpson.

751. Is that a frequent occurrence?—No, very seldom; he being in the house sees the cases; but there are so very few that they are hardly worth mentioning. With regard to poor people, I seldom could see a fine vesicle, I never could vaccinate from them.

752. For a good production of that disease the child must be plump and well fed?—Yes, the child must be healthy, and the children that we have are healthy children; and if we had not such, we could not perpetuate the disease.

J. C. Carpue, Esq.

20 March 1833.

753. How often has it happened to you to lose your independent supply of lymph?—Once or twice; I may have had plenty of cases upon my book, but the parties having given a wrong direction, I could not find them, and they will not come in cold or damp weather.

754. Is there not a very great demand for supply of lymph from the country?—A very great demand.

755. Do you not think that sooner than the disease should be lost, medical practitioners would be ready to come forward to keep it alive by private subscriptions?—Medical practitioners are so ill paid, from the pressure of the times, that they could not afford it.

756. Do you not know that a great many of the medical practitioners prefer subscribing to many of the other institutions for promoting vaccination, for a supply of lymph, to applying to the Vaccine Board?—I do not think there are.

757. Have you ever heard that the present Vaccine Board refuses to supply lymph to druggists?—I do not believe it; they are very liberal in their supply.

758. Do you not believe that they confine their supply to their medical practitioners?—I sent 2,000 or 3,000 last year myself.

759. Do you know anything of the society that existed antecedently to the period of the institution of the Vaccine Board, the Jennerian Society?—No, I know nothing about it; there was a Jennerian party and a party under Dr. Pearson, and we did not associate.

760. Have any complaints ever been made of the supply of lymph that you afford?—I dare say there may be, but I do not know of such.

761. On the average, you believe that the supplies of lymph that you afford are just as efficacious as any others?—Yes, because it is sent as soon as taken from the patient.

762. What do you consider the most efficacious mode of transmitting the disease and of arming the points?—I think points are exceedingly bad; once we introduced platina, which answered much better, for in points there is a connection of animal matter with animal matter; in hot weather I think there is a decom position of animal matter.

763. What do you consider is the best mode of transmitting the disease?—On platina or iron.

764. Is not iron subject to the objection of rusting?—Yes, but they have some way of dipping it in a solution of gold; I wonder points take so well as they do; I think glass takes better.

765. If any institution were formed for perpetuating the vaccine disease, would you recommend that institution, as far as the stationary vaccinators are concerned, to pursue the course, and to organize the same system, as that of the Vaccine Board?—I think there cannot be a better system.

766. Do not you think, if you had opportunities of making a system anew at the present day, and in the present state of knowledge of the disease, that one medical officer appointed to superintend the stationary vaccinators, keeping a register and giving them directions in case of any point of difficulty or anomalous form of disease occurring, would form an adequate establishment for the purpose?—He would have a great deal to do.

767. What do you mean by a great deal?—He would have so many letters to answer; it would take a vast deal of time.

768. Do you know how many letters the present registrar receives?—No, I do not know; but I see a great number of letters when I go to my station, lying on his table.

769. Do you think many of them are cases of difficulty?—I apprehend not; as I do not see them, I cannot say.

770. Do you ever accompany the inspector in any of his visitations?—No; I did formerly, but lately there has been no occasion for it at all.

771. Do you know from what source the druggists in London obtain their supply of lymph principally?—I do not know; I should suppose from our institution.

772. Do you know whether the druggists are in the habit of supplying country practitioners?—Yes; I know that I have supplied a great many druggists, from my books; there is a list in my book of the quantity to the different persons, and they write down what they please; I have never refused any druggist.

773. From the observation you made upon the child vaccinated at the Small pox Hospital, are you of opinion that the mode of vaccination in practice at the Small-pox Hospital is not a judicious one?—I do not like the plan; I think it would be barbarous to bleed a child in vaccination.

774. You

774. You do not know that the practice is general?—It is not general; women come to me and say that they do not like to go there, because that is the practice. I believe it is a theory that the gentlemen have; I do not like my patients to bleed, if I can help it.

775. Are you not of opinion that it is desirable, as a guarantee for the ability of the vaccinators, that they should be responsible to certain medical authorities of eminence?—I think so, as regards young men; but I think practitioners of a certain age who have great character, and so on, should not be responsible.

776. Do you think it would be possible to procure a single medical officer to answer that purpose, to devote his whole time to it?—I think you might, if you paid him well.

777. What do you consider would be a fair remuneration?—It would be very considerable.

778. What would be the amount?—I should say, if I were to take it, give me 500 *l.* a year at least; it would take up a great deal of my time; I think I should lose by it then.

779. Do not you think it probable that a barbarous mode of operation, such as you speak of at the Small-pox Hospital, would generally prevail, if the Board were done away?—No, I do not think it will ever be used; I think the generality of surgeons vaccinate exceedingly well; they have got into the habit of it.

780. Do not you think that that successful mode of operating now introduced, like other modes of operating in any other disease, is likely to be perpetuated amongst the good practitioners?—Yes.

781. Without any general Board to superintend it?—Yes.

782. Are you aware that the active duties of the Board are at present performed by two officers; the inspector, whose business it is to visit the stations, and the registrar, whose business it is to keep an account of all letters and communications?—I have heard so, but I do not know. I would take the liberty to observe, that I am so fearful of the small-pox being carried about, that if ever I go to a patient who has had small-pox, before I come to my station I change my clothes entirely. I am astonished that there is a small-pox hospital in London, and next to that hospital that there is a typhus hospital.

783. Are you aware that the Small-pox Hospital is not established for the purpose of inoculation, but only for receiving patients who have taken the natural small-pox?—Yes, I know that full well; but I know that by passing by the window of the Small-pox Hospital you may be infected.

784. Then you consider that if the Small-pox Hospital were to be one of the institutions for keeping alive the disease, it would not be expedient that the building in which they should conduct it should be too close to the hospital for receiving patients for the small-pox?—Certainly not.

785. Are you of opinion that the disease of typhus can be communicated to any persons where there is an interval of a free current of air?—I do not know.

786. Are you aware that in the hospitals of the city of London, typhus fever patients are mixed safely in a certain proportion with other patients, and that the other patients never take the disease, unless the number of typhus patients be increased beyond a certain proportion, bearing a relation to the size of the ward?—Not being a physician I do not think myself qualified to say anything upon it. I beg leave to state the following fact: one of my pupils died of typhus; the nurse who attended him died of it; the friend in the next room died, and the servant of the house died.

787. Are you not aware that in the London hospitals, which are now so well ventilated, typhus fever patients, if they do not exceed a certain proportion, compared with the size of the room, are safely mixed with the other patients: St. Bartholemew's Hospital and others are referred to?—I do not know.

788. If that be the case, and that in the same room typhus fever patients are safely mixed in a certain proportion with other patients, do you anticipate any great danger of the persons going near the small-pox building receiving typhus fever from that ward which is devoted to typhus fever patients; the air blowing all around this typhus fever building?—I do not know; but I would not go there.

789. Have you ever heard of a person catching the typhus fever by passing in that part of the town too near that typhus fever ward?—No, I do not know that I ever did; I do not attend those cases.

Veneris, 22° die Martii, 1833.

HENRY WARBURTON, ESQ. IN THE CHAIR.

Dr. *George Gregory*, called in; and Examined.

Dr. *George Gregory.*

22 March 1833.

790. YOU are Physician to the Small-pox and Vaccination Hospital at St. Pancras?—I am.

791. How long have you held that office?—Eleven years.

792. You have been engaged extensively in the practice of vaccination?—I have.

793. You have also seen extensively cases of small-pox?—I have.

794. Were you engaged in the practice of vaccination or small-pox before your appointment to that institution?—I was, for about two years.

795. Will you state what were the former, and what are the present objects of the Small-pox and Vaccination Hospital?—The Small-pox Hospital was originally formed for the diffusion of inoculation among the poor of London, and for the reception of cases of casual small-pox. In 1799 the hospital began to vaccinate out-patients, and has continued to vaccinate out-patients till the present time.

796. The changes in its practice, from inoculating for the small-pox to vaccination, are stated in the Return you have made to the Committee, No. 7?—They are.

797. Have you any Return of the number vaccinated at your establishment for the last 25 years?—I have. Here is a Return from the year 1809 to the year 1828, and the Return I sent before will carry it on to the present time.

[*The Witness delivered in the same, vide Appendix.*]

798. Have you any out-stations, or is all performed at the central station?—At present there are no out-stations.

799. Do you supply charges of vaccine lymph to medical gentlemen?—To medical gentlemen, and all other applicants.

800. Do you supply it, not only to medical gentlemen in London, but to medical gentlemen elsewhere?—To medical gentlemen in the country and in London, and to all who apply, whether in the country or in town, whether professional or otherwise.

801. There is no reserve in supplying lymph to druggists?—No.

802. Are all such supplies gratuitous?—They are.

803. It appears that of the number of applicants supplied you have kept no register, except during the last two years; and the number of charges of lymph supplied to each applicant is not stated?—It is not, because they have been supplied for the most part with as many charges as they required.

804. It appears that the average supply of the years 1828, 1829 and 1830, was 600; that the number of applicants supplied in 1831 was 1,050; and that the number in 1832 was 1,443. It appears, therefore, that the number of applicants supplied is considerably on the increase?—It is, rapidly.

805. Can you form any notion what would be the average number of charges supplied to each applicant?—I should say, upon an average, two for each applicant. Many are supplied with a very large number.

806. Can you state what is the number of charges supplied within the most recent period?—Yes, I have a Return here; 341 applicants have been supplied in 1833, up to the present day, and of them 100 between the 1st and 21st of March.

807. Have you kept any register of the actual number of charges of lymph supplied during 1831 and 1832?—No, I have not.

808. To what circumstance do you attribute the considerable increase that has taken place during the last two years?—To the advertisements which in 1831 were directed by the committee of the hospital to be inserted in all the public papers, and in the professional journals, announcing the readiness of the hospital to supply lymph gratuitously to all applicants.

809. Do there appear, amongst the applicants for lymph to your establishment, the names of any gentlemen who have applied on the part of foreign governments?—Not on the part of foreign governments, but on the part of foreigners.

810. Expressly to send to foreign countries?—Expressly.

811. The list of such persons is contained in the Return you have made, No. 3? —It is.

812. Are there any public establishments that you are in the habit of supplying in this country?—If under the term public establishments are meant hospitals and charities, there are a considerable number so supplied; and I may likewise mention that we have for many years been in the habit of supplying the regiments of Guards which are stationed in the Regent's Park and in Hyde Park barracks.

813. Do you not supply many of the parish infirmaries?—We do.

814. And you supply them gratuitously?—We do.

815. Is it generally known in London that your establishment distributes vaccine lymph gratuitously?—It is known to many, but I believe there are still a great many who are ignorant of this arrangement.

816. Do you particularly supply in London the medical gentlemen who live in the immediate neighbourhood of the hospital, or does your supply extend to medical men in all parts of the metropolis?—It extends to practitioners in all parts of the metropolis; those in the more immediate neighbourhood of course apply more frequently to us.

817. Have you any list of the applicants that you have supplied?—I have; here is a list of all that have been supplied since October 1831, to the present day, with their addresses.

[*The Witness delivered in the same.*]

818. Do the gentlemen whom you have for the first time supplied with lymph, continue to apply for charges to your establishment?—They do; the same names will appear frequently in the list which has been laid before the Committee.

819. All those applicants have the option of applying either to your establishment, to the London Vaccine Institution, or to the National Vaccine Board, for their supplies?—They have.

820. In consequence of their applying successively to your establishment, have you reason to suppose that they give a preference to yours?—I have reason to suppose that they are satisfied.

821. Have you ever heard them assign any reasons why they are particularly satisfied with the supplies that you afford them?—I have heard it stated that the hours of attendance at our institution, and the circumstance of its being open every day in the week constitute a great recommendation to gentlemen to apply to us.

822. During what hours is it open every day?—From ten to one.

823. During what hours do you observe that the attendance of parents is greatest?—From eleven to one.

824. To what classes in society do you observe that the parents of the children brought to you principally belong?—They principally belong to the upper class of workmen, and the lower branches of the middle classes.

825. Do you think that the hours from ten to one are the most convenient in the day that could be chosen?—I think that from eleven to two would be generally more serviceable.

826. Have you heard the parents of children express a wish upon that subject? —I have.

827. Is the attendance equal upon all days of the week?—No, it is not; the early parts of the week are always the most busy.

828. From what cause do you suppose that the attendance is greater on the early days of the week?—On the latter days of the week the mothers are more occupied in making their household arrangements. In the early part of the week they are less occupied.

829. Do you think that any of the six days could be dispensed with?—I think perhaps the Saturday might, but no other day.

830. Then you do not think that confining vaccination to two or three days in the week is a desirable arrangement?—I consider that no large establishment can be so conducted without some inconveniences.

831. By large establishment you mean an establishment vaccinating upon the scale in which it is carried on at your hospital?—Yes.

832. Have you any particular reason for thinking that to vaccinate every day in the week is better than confining it to a smaller number of days?—Yes; because by that means we have an opportunity of taking lymph on every day of the vaccination.

Dr. *George Gregory.*

22 March 1833.

833. May not various accidents occur to parents, and various occupations prevent them from attending on any two days of the week that might be named, whereas if every day in the week your station is open, the total amount of vaccination is greater in consequence?—Certainly; the state of the weather may prevent them, or their domestic occupations.

834. Do you make it a condition that those children who are vaccinated at your establishment shall return, in order to afford a supply of lymph?—We do.

835. Do you find that the parents generally comply with your wishes?—Almost universally.

836. Is there any peculiar mode of vaccination practised at your hospital?—No. I believe all practitioners in London vaccinate now nearly in the same way, and the difference appears to me only to regard the number of incisions.

837. What is the number of incisions that you find it most desirable to make?—For the greater supply of lymph, we generally insert from eight to twelve.

838. Is there any mode of vaccination which gives greater security than another?—I know of none.

839. If you heard it said, that the mode of vaccination at your hospital is more rude than at other places; for instance, that in vaccinating the lancet is inserted so deep that the patient is left quite bloody, should you say that that was a true representation or not?—Certainly there is blood drawn, but the lancet is not inserted too deep.

840. Do you consider it advantageous or not that blood should be drawn?—I do.

841. Will you state the reasons why you think so?—In order to insure vaccination taking effect, the matter must come in contact with the absorbing surface of the skin; that absorbing surface is very vascular, and consequently effective vaccination is accompanied with bleeding.

842. Can it be called pain that the patient endures under your mode of vaccination?—Certainly not.

843. Would you call it only a slight degree of inconvenience?—Only a slight inconvenience; and my reason for saying so is, that adults, of whom we vaccinate a great number, have expressed to me that opinion.

844. Can you state by comparison of the mode of vaccinating by superficial and by somewhat deeper incision, that the vaccination by deep incision is the most successful?—I can say so, because I have made a variety of experiments upon the depth to which incisions may extend with the greatest chance of effect.

845. From how many trials made in those experiments have you deduced your calculations?—Vast numbers of comparative experiments, which I made when I first was appointed physician to the hospital.

846. To what extent did they go?—Many hundreds.

847. Therefore you state positively, as the result of your experience during those comparative experiments, that a somewhat deeper incision is the most successful mode of vaccinating?—I do.

848. Does your supply extend to a considerable number of country practitioners?—To a large number.

849. Has the demand for lymph from country practitioners extended, as well as from those in London?—In a very great degree.

850. Has anything been stated to you as to the greater certainty of the lymph that you supply, than belongs to the lymph supplied by other private or public institutions?—I have never asked for information on that point.

851. Does the lymph you transmit into the country differ from the lymph that you supply to the practitioners in London?—We sometimes supply *points* to the country, but generally glasses.

852. Will you exhibit to the Committee your mode of transmitting lymph?—These are ivory points, armed ready for use; these are armed glasses, also ready for use [*producing the same*].

853. What is the mode of using the glasses?—The mode of using the glasses is, separating the glasses, moistening them with a drop of the blood of the patient who is to be vaccinated, when they are dry; if otherwise, and the lymph quite fluid, to insert it in the usual mode.

854. Is the point of the lancet smeared over with the fluid upon the glass?—It is.

855. Is there any impediment to your supplying practitioners in the country, which does not apply to the transmission of lymph to practitioners in the country from the

National

National Vaccine Board?—The free transmission of lymph by post is, I believe, the principal reason why our demands from the country are limited.

856. What is the cost to any distance you can name from London of transmitting your supply of lymph by post?—The original cost of the letter making the demand, and a double letter, at least, in reply.

857. Taking any place, like Exeter for instance, what would be the cost to a practitioner in the country for those two letters?—I have reason to believe that it is not less than 5*s*.

858. And yet although practitioners in the country who may apply to the Vaccine Establishment obtain it free of any postage, still there is a considerable number of applicants to your institution?—There is.

859. Are applications made to your institution by persons who are aware that they can obtain a supply gratis from the Vaccine Board?—I presume that they are acquainted with that which is generally known to the profession.

860. How do you account for their applying to you, and incurring this expense, when they know that they may obtain it gratis from the Vaccine Board?—I confess I have often been surprised at their making application to us; I presume that they are satisfied with the supply of lymph which we send them, and they therefore persevere in sending to us, not to risk the chance of want of success.

861. Would the permission to send lymph post-free greatly extend the supply which you are in the habit of sending to country practitioners?—I am quite sure it would; and we have applied for permission to Government on more than one occasion.

862. What has been the result of those applications?—We have unfortunately not succeeded in any of our applications to Government.

863. Have any reasons been given for the refusal, or has there been a simple negative?—I cannot answer that question accurately; the secretary of the hospital has all the answers.

864. How long ago is it since you made application to the Government for permission to send the charges of lymph post-free?—The most recent application was about three weeks or a month ago.

865. Are not most practitioners in the habit of giving a preference each to their particular source of supply?—Yes, they are. I know many practitioners who, beginning with Dr. Walker, have still continued to apply to him, and in like manner with our own establishment.

866. Do any obtain their supplies from druggists?—A great many medical men in the country receive their supplies of vaccine lymph through the medium of their druggists.

867. Are many applications made to you by druggists for a supply?—There are; a considerable number.

868. Do you believe that the druggists so apply to you for the purpose of transmitting the charges to country or London practitioners?—Mr. Wheeler, the resident surgeon, will be better able to answer that.

869. Do you think that this preference given by practitioners to a particular source of supply is a feeling that ought to be encouraged or discouraged?—I think it should be encouraged; and if I were myself in the country, I should like to continue to receive my supplies of lymph from the institution upon which I have been so long in attendance.

870. Do any of the druggists that apply to you apply with a view of sending the charges abroad?—They do. Mr. Courtenay has applied to us for the West Indies; Mr. Chevalier also has repeatedly taken lymph from our establishment to send to the West Indies.

871. Do you rather encourage than discourage such applications?—We do; and we afford every facility.

872. Are you able at all times to meet all demands?—Throughout the whole of the summer months we have never any difficulties. In common with other establishments, we meet with difficulties during the winter months.

873. What is your mode of transmitting lymph to foreign parts?—We have transmitted lymph to foreign parts in tubes hermetically sealed; but it was so very long and troublesome a process that we have not practised it ourselves. We have, however, permitted others to arm their tubes at our establishment.

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874. Do you believe that that method of sending lymph in tubes hermetically sealed is the most successful when it is to be sent to a distance or into hot countries?—From some recent statements I have reason to believe that when lymph is collected in considerable quantities, it undergoes a fermentation, and becomes effete and inefficient.

875. Do not you think it possible that, on principle, dried lymph may undergo less change in a hot climate than when it retains any moisture?—On principle, I am disposed to think it may.

876. What was the original source of the vaccine disease, as you have it at the Small-pox Hospital?—There is a note of the original introduction, signed by the gentleman who was the old apothecary at our hospital: "Vaccination was first introduced into practice at the Inoculation Hospital by Dr. Woodville, with the disease taken from the cows belonging to Thomas Harrisson, esquire, of Gray's-inn-lane, St. Pancras, on the 19th day of January 1799; and six patients were vaccinated by the doctor in the presence of Sir Joseph Banks, bart., Sir William Watson, Drs. George Pearson, Maxwell, Garthshore, W. Willan, and other gentlemen."

877. Did you endeavour to keep up the disease from that early period?—We did; and I have reason to believe that there has been an uninterrupted descent of lymph from that period.

878. Do you believe that the disease in London is principally derived from that source of Dr. Woodville, or that it is derived from Dr. Jenner's experiments?—I believe the whole of it is from Dr. Woodville's.

879. Then your belief is, that the disease, as it exists in London, has been entirely derived from the lymph resulting from the experiments of Dr. Woodville?—Yes.

880. You are not aware of the supply having been lost, upon any occasion, from that period to the present?—I am not aware of it.

881. Do you believe that it has been lost?—No; I believe it has not been lost.

882. Is there any record at the Small-pox Hospital of its having been lost?—None.

883. From what period can you state, with positive certainty, that it has been kept up uninterrupted at the Small-pox Hospital down to the present time?—I can speak from the year 1819; and I remember asking Mr. Wachsel upon the subject; and I think I can venture to say that his answer was, that it had never been lost at our institution.

884. What is the reason that it is more easy to keep up the supply in summer than in winter?—Partly, that greater numbers attend during mild weather; partly that in cold weather the absorption from the arm is less active.

885. Have you a greater or a smaller number of patients in the winter than in the summer?—A smaller number in the winter always.

886. Would it not be desirable that you should endeavour to have a large number of patients in the winter, as the taking of the disease is less certain at that period?—We make every effort to increase the number during the winter; we coax them to attend.

887. It appears that the number of patients vaccinated by you in 1832, in London, was 3,701; do you think that vaccination, kept up upon that scale, affords a certainty of preserving the disease uninterruptedly?—I do.

888. Would you appeal for that to your own experience at the hospital since 1819, and to the previous experience of your predecessors there?—Certainly.

889. Nevertheless, would you consider it desirable, for greater certainty, that the scale upon which it is carried on, if there were means, should be somewhat increased?—I do not think it is possible to extend any one establishment much beyond the present number, because of the distances to which parents must come.

890. If then it were desirable for any particular institution to extend its scale of vaccination, it must have branch stations for the purpose of extending it?—I consider it absolutely necessary.

891. From what distance do the patients in general come to your institution for vaccination?—I would say, within the circumference of about half a mile from the hospital.

892. Are there any stations of either the National Vaccine Board, or of the London Vaccine Institution in that neighbourhood?—There is one of the National Vaccine in our neighbourhood, within half a mile.

893. Does

893. Does that institution engage any considerable part of the children requiring vaccination in your neighbourhood?—I do not know the number vaccinated at that branch of the National Vaccine Establishment.

894. Is it not at all times within your power, if you find the number of patients during any period in the winter to be very much reduced, to find patients expressly for the purpose of preserving it?—It is very difficult to do so. I have done so occasionally.

895. Why is it difficult?—Because mothers are naturally and very properly averse to expose their children to frosty weather, and to its consequences.

896. Have any attempts been made by your institution to extend its usefulness in the vaccination department?—The establishment of branch stations was agreed upon by the governors about a year and a half ago, but the plan has not been carried into effect; first, on account of the breaking out of the cholera, which occupied public attention so much, and more recently in consequence of the present Committee having been moved for in the House of Commons.

897. Did you go so far as actually to appoint stations, and name gentlemen to them?—We did; four stations were appointed.

898. What officer of your institution will be able to afford the Committee the most accurate information as to the calculated expenses of maintaining each branch station?—I think that I can give as much information as any other officer.

899. Will you state what is the scale of expense, and the remuneration necessary to maintain each branch station?—On the appointment of those gentlemen they were given to understand that the funds of the hospital did not at the present time authorize their receiving any emolument; but it was hoped that in the course of a short time arrangements might be made, by the increase of public subscriptions, which would permit them to have a reasonable recompense; and I myself calculated that 50 *l.* a year was the smallest remuneration which a gentlemen could be offered for such duty.

900. When you say the smallest, do you think that 50 *l.* a year would be considered a reasonable remuneration for the performance of the duty?—For the performance of the duty at a small station which was adapted for the supply of practitioners in particular neighbourhoods; but not a sufficient remuneration for the supply of a large establishment which should furnish lymph for the country.

901. Where was it that the four stations were selected, which were upon the very point of being instituted?—Paddington, Pimlico, Tower-hill and Spitalfields.

902. Were there any of the Vaccine Board Establishments immediately in those neighbourhoods?—We selected parts of the town where we had reason to believe we should come least in contact with the National Vaccine Establishment.

903. Would 50 *l.* a year for those stations, calculated for the supply of practitioners, include the whole expense, or would there be any rent and other expenses to be paid?—There would be the contingent expenses of registers, and points, and glasses, which however is small.

904. At what should you calculate the expense of each such station, salary and contingent expenses included, that is, for stations upon this limited scale?—£. 60 a year.

905. What would be the expense of a large establishment devoted to the same purposes, which should supply the public as generally as would be desirable?—I should say that any station which occupied a medical man from eleven to two for five days in the week, could not be conducted at less than 100 *l.* a year; and I think that 150 *l.* a year would not be too much.

906. Do you think you could have the duty performed for 100 *l.*?—I think I could venture to say that I could have it well done at 100 *l.* a year.

907. At what would you rate the contingent expenses there?—The contingent expenses there would be considerably more; because I hold that no large establishment for the supply of lymph for the country and foreign stations can be carried on, except in some public situation as distinguished from a private residence; and I particularly specify, as worthy of imitation, the principal station of the National Vaccine Establishment at Rowland Hill's chapel, which has been from the earliest period of vaccination the leading station to which all parties on the southern side of London apply.

908. At what would you rate the contingent expenses of such a station, independently of rent?—Certainly not to exceed 20 *l.*, perhaps even less.

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909. In the choice of a station would it be necessary to include rent, inasmuch as you probably would select a practitioner who had already an establishment in some public thoroughfare?—I do not think that there is any private practitioner of this town who has accommodation for an establishment upon the scale which I presume will be necessary.

910. At what should you calculate the rental necessary, independent of the contingent expenses?—I can form no estimate of that, because I can very well conceive that some public situation could be pointed out, like that of the vestry of Rowland Hill's chapel, which would be adequate to the purpose.

911. Would 30 *l.* a year be sufficient, upon an average?—I should not consider that sufficient.

912. Would 50 *l.* be sufficient?—Perhaps adequate accommodation might be found for 50 *l.* a year.

913. Upon the average, would you consider the sum of 50 *l.* not excessive?—Certainly not; and I think it could not be got for less.

914. You stated that in consequence of the appointment of this Committee, the actual putting in train of those branch stations has been deferred?—It has.

915. Did the establishment to which you belong calculate, at the time they contemplated setting those branch stations on foot, what sum it was that they would each cost upon the average?—No, it was not calculated.

916. Was it calculated that the funds of the institution would be sufficient to meet the expense?—No expense was contemplated at the time; it was to be gratuitous labour.

917. Did you find medical practitioners who were ready to undertake to conduct those vaccine stations?—There were an immense number of applications.

918. To what do you attribute their willingness to conduct such establishments gratis?—To the hope of ultimate profit, unquestionably.

919. Would a certain degree of credit attach to being so appointed?—Perhaps in a slight degree.

920. During how many hours in the day were those gratuitous vaccinators to open their stations, and during how many days in the week?—It was intended to open their stations only for one hour in the day, three times a week.

921. Do you think the directors of the Small-pox Hospital contemplate the revival of this plan of vaccine stations?—I think that they do.

922. Do you think that the public would encourage it by subscriptions, or otherwise?—I do not think the public would encourage it so long as the National Vaccine Establishment was kept up.

923. Was it a part of your plan to extend this beyond London itself?—It was my intention, after giving a fair trial to the plan, to have proposed to the committee an extension of it to the suburban districts, for instance, to Greenwich and other places with adequate population, in the course of a year or two, and in the event of success.

924. Do you think there were reasonable grounds for expecting success in this plan?—I do.

925. Even although the friends of the institution were not so increased as to enable you to pay salaries?—I confess I have many doubts whether they could have gone on without salaries. I do not think they could.

926. Do you suppose that a less salary than what you have spoken of, say 25 *l.* a year, would have induced the gentlemen, who first undertook it gratis, to go on with it, if it were explained to them that the funds of the institution were so limited that they could not give a greater salary?—I think they would have done it at a less sum if they had had any prospect of being assisted by contributions from medical men in the neighbourhood.

927. Do you think they would have been assisted by contributions from the medical gentlemen in the neighbourhood?—So long as the National Vaccine Establishment is kept up, certainly not; but in the event of any change narrowing the efficacy of the National Vaccine Establishment, I feel quite satisfied they would have received assistance from the professional gentlemen in the neighbourhood.

928. Have you brought with you the proposed regulations for those branch establishments?—No, I have not.

929. What staff of medical officers do you consider would be adequate for superintending those vaccine stations, either upon a limited scale, for the supply of medical practitioners, or for the supply of the public generally, presuming that the establishment

establishment to which you belong had funds for maintaining them?—I conceive that one person giving up the largest portion of his time, would be amply sufficient to regulate and keep in motion the whole machinery.

930. Would you comprehend in the duties of such a person the occasional visiting of the stations, and keeping a register of all applicants, and all anomalous cases that occurred, and perhaps making, at stated periods, summaries of the result of the practice of the institution?—Certainly all those points, with the addition of the superintendence of the transmission of lymph to the country, free of postage, which I consider as an indispensable ingredient in any management whatever.

931. What salary do you think such officer would be entitled to, such officer being the sole one to superintend or to conduct all the business of such an institution?—I contemplate placing a person of authority and character in the profession at the head of such an establishment; and I should say that such a person could not be offered less than 250*l.* or even 300*l.* a year.

932. And you would not think the sum of 300*l.* a year an unreasonably small recompense for such duties?—No, I should think it would be a fair and reasonable compensation; I should say that a man moving in the sphere of life which I contemplate could not give up his time for such an object at a less salary.

933. Are you acquainted with the constitution of the National Vaccine Board?—I know something about it, though I do not pretend to much knowledge of the detail.

934. Do you consider it well calculated to meet the objects proposed by Government?—I think many of the arrangements are exceedingly good, and more especially I advert to the arrangements at Rowland Hill's chapel, which appear to me to be excellent; and many of the other arrangements excellent, as far as regards the supply of practitioners in London.

935. Are there any respects in which you consider the constitution of the Board faulty?—I do not feel myself competent to give an opinion upon that subject; perhaps I would say that I think there are more persons employed in that Board than are absolutely necessary for the due performance of the duties.

936. Do you not consider that some of the offices of that Board are in a great degree sinecures; that is, that the officers do not actively superintend the whole machinery of the institution?—I am not sufficiently acquainted with the details of the proceedings of the Board to give an answer.

937. Do you think it desirable that officers should occupy that station who are liable to change from year to year?—I consider that any person engaged in the Vaccine Establishment should have a very accurate acquaintance with the appearances of vaccination in all its details, which can only be got by continued observation and experience.

938. Do you not consider it desirable, therefore, that any person or persons constituting the head of the establishment should be permanent officers?—I certainly do consider that it would be desirable that they should be permanent officers.

939. Do not you consider that it would be desirable that the head or heads of the Board should have a practical intimate knowledge of the vaccine disease?—I do.

940. Do you think it desirable that both the heads of the Board, and the sub-officers employed to vaccinate, should be intimately acquainted with the disease of small-pox?—That is much less necessary. Certainly it is very desirable, if they have to superintend anomalous cases, that they should have an acquaintance with small-pox.

941. As in the course of vaccination there must be many anomalous cases that come under their cognizance, is it not almost necessary that they should have a practical knowledge both of small-pox and other cutaneous diseases?—It is certainly highly desirable that they should.

942. Do you not think it desirable that the head of such an institution as you contemplate should not be so extensively engaged in private practice as to preclude his taking a comprehensive view of the whole machinery of the institution, and at all times vigilantly superintending it?—I think he should not.

943. Do you think it should be a part of the duty of such a principal officer to correspond with the various London or country practitioners upon the subject of any anomalous cases that may occur?—Such a duty would increase the amount of his labours. No doubt it would occasionally be desirable to communicate upon anomalous

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cases, but, generally speaking, I think those cases may very well be left to the profession.

944. Do you think that the profession, through the various medical journals and other public channels, will be sufficiently disposed to give an account to the medical world of such anomalous cases as occur within their practice?—I do.

945. Has the present Vaccine Board, to your knowledge, made known to the medical world any digest of the various anomalous cases that have come before it, so that the world may be benefited by the result of their extensive practice?—I have never seen anything from the National Vaccine Board, except its Reports to Parliament, which do not enter into details on those points.

946. Do they enter sufficiently into details of anomalous cases of the disease, to be of use to medical men in their own practice?—I should venture to say, perhaps, that the National Vaccine Establishment has not given those full details which they are capable no doubt of doing.

947. Do you not think that the periodical publication of the result of their extensive practice, as regards the number of cases of small-pox after vaccination, and the various cutaneous diseases which have an influence upon vaccination, might have been of very great use, not only to the medical world, but to the public, in giving them a proper notion of the preventive power of vaccination, as regards small-pox?—I think I can foresee many difficulties in drawing up such a digest, and some circumstances which might make it desirable not to have recourse to such a measure.

948. What are those circumstances?—Perhaps the effect contemplated might not always be found that which would follow; the public might perhaps become alarmed, without cause, from such statements.

949. Do you not think that if the result were presented to them as a per-centage upon the whole number of cases, it would be highly favourable to vaccination?—I think it would be extremely difficult to draw up a digest of that kind which might not be misconstrued.

950. Are you not aware that many foreign governments have drawn up such digests?—I am aware that the Swedish government have done so, and that the Piedmontese government in their last epidemic have done so, and I have brought them both with me.

951. Do you think, upon the whole, that the correspondence which the head of such a department as you contemplate would have to conduct with medical practitioners, would not be very extensive, that in fact there would be few cases of importance in which it would be desirable that he should conduct such a correspondence?—I think very few indeed.

952. Do you think that the principal duties of the head of such an institution would be first to take care that the vaccine disease to be kept alive was an authentic form of the disease; and secondly, to take care that there should be a perpetual and ample supply of lymph to applicants?—I think that those two are the great and only essential parts of his duty.

953. Do you think that, considering the great number of medical men of intelligence to be found in this country, there would be any difficulty in selecting one competent person efficiently to conduct such an institution?—I believe that no difficulty would be experienced in finding a man perfectly qualified for all those duties.

954. And to conduct such an institution at least as efficiently as the business of the Vaccine Board is now conducted?—I would say, so far as regards the supply of lymph, and the careful superintendence of its purity, that it might be done as effectually.

955. What value do you attach to the supposed weight of authority that may accrue to the practice of vaccination, from the persons superintending such an institution being men engaged in very extensive practice, and being men very eminent in their profession; one, for instance, being the President of the College of Physicians, or the President of the College of Surgeons, and the others high officers in the College of Physicians; do you think that the eminence of the medical and surgical men belonging to such an institution tends much to raise the value of vaccination in the eye of the public, and thereby to extend the practice of vaccination?—The National Vaccine Establishment unquestionably enjoys the confidence of the public; how much of that is owing to its connexion with the Government, and how much to the actual composition of the Board, it is difficult, I would say impossible, to state accurately; but as far as I am able to form a judgment I would say, that the confidence reposed in the Board mainly depends upon its connexion with

with the Government, and upon the security thus given that its duties are efficiently performed.

956. If there were an institution superintended in the manner you have described, by a medical officer of high character, and if the Government were to countenance openly such an institution, and were to give to that institution the privilege of transmitting lymph post-free, do you think it would in any less degree share the confidence of the public than the Vaccine Board now does, and that by the substitution of such a Board for the present Vaccine Board, the practice of vaccination through this country and its dependencies, or foreign countries, would be likely to be diminished?—I believe that such a Board, having the full countenance of Government, and possessing the privilege of transmitting lymph free of postage, would be equally effectual with the present Vaccine Board in diffusing the supply of lymph, in satisfying the minds of the public, and in keeping up that character which England now enjoys as the diffuser and encourager of vaccination.

957. Are you aware of the number and situation of the various branch stations of the National Vaccine Board?—I am not. I am acquainted with a few of those in the west-end of London, but not with the others.

[*A paper was shown to the Witness.*]

958. What opinion do you form from that list of the various stations of the National Vaccine Board now laid before you, as to the fitness for the object of those arrangements; do you think that they are too numerous, or not sufficiently so?—I should say that they were not at all too numerous for the accommodation of medical gentlemen in London.

959. Do you think they are too numerous for the great object of keeping up to a certainty the perpetual supply of lymph?—I should say, looking at them, that they were too numerous for the purpose of procuring a supply of lymph for the wants of the public generally, without reference to the accommodation of individual practitioners.

960. Do you not think a certain degree of concentration of patients at each station is very desirable for the purpose you have just mentioned?—I do.

961. Supposing that to be the great object of such an institution, are you prepared to state how many stations you would have, and how you would distribute them?—When I contemplate the size of London, I consider that four large stations, vaccinating about 4,000 annually, would be quite sufficient for the supply of lymph to the public generally.

962. Would you also say that that would be the most efficacious machinery for perpetuating the supply?—So far as regards the supply generally to the country.

963. Would you state it as a matter of moral certainty, that four stations on that scale in London would perpetuate the supply of lymph in this country?—Yes, I would say so, unhesitatingly.

964. Do you think, that if the vaccination at all the branch stations but the principal one, is limited to either two or three days in the week, and if the hours of vaccinating at each of the stations, including the principal, is one hour in the day, that that is too small a number of days, and too limited a number of hours for the purpose?—It depends upon whether that purpose is the accommodation of medical gentlemen in the vicinity, or the accommodation of the public generally throughout the country; I consider it as quite sufficient for the accommodation of medical gentlemen in that vicinity, but I should doubt, from the experience of my own institution, how far it is sufficient for the supply of lymph in large quantities for the public.

965. What views do you entertain as to the policy or impolicy of the Government withdrawing altogether the funds now given in support of vaccination?—I consider it quite indispensable that Government should retain a superintendence over vaccination in this country; and I do not know how that superintendence can be maintained except through the medium of some pecuniary grant, which is to keep certain officers under the control of Government; and further, I consider Government superintendence as indispensable, because without it the transmission of lymph to the country free of postage could not take place, and I look upon that as an indispensable feature in every arrangement which a wise and prudent Government would adopt, with reference to vaccination and the general interests of the public.

966. Do you think that the grant of 2,200*l.* a year, now afforded by the Government in support of vaccination, is greater than is necessary for the purpose of

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keeping up the perpetual supply of authentic lymph?—I think that a less sum might be sufficient, under a different arrangement than that which now exists.

967. Do you think that if a less sum were given to an institution constituted as you have already described in your former answers, a less grant than that would be sufficient?—I do.

968. Have you ever considered that the Government, by taking upon itself the supplying funds to any institution, charitable or otherwise, very often altogether prevents the public from supporting such institutions by private subscription?—I have, and I consider that there are strong grounds in this instance for deviating from the principle of non-interference.

969. Do you think that the supplying of funds tends to deaden the enthusiasm of the public in support of that object for which the Government grant is supplied out of the public purse?—It certainly lessens the number of private subscriptions which otherwise would flow into the different vaccine institutions.

970. What opinion should you form of a grant upon such a principle as this, that the Government should grant a third or a fourth of the income which is raised by any society by private subscriptions, keeping in its own hands the power of superintending the conduct of such an establishment, and taking a guarantee from such society, that it should furnish a supply of lymph to all applicants as a condition for continuing its support?—I should think that such a plan might be very well adapted to certain parts of London, and to large towns, say Liverpool, Edinburgh, Newcastle, and other towns, which have an adequate population; but I conceive that it would be very desirable that for the supply of foreign countries, and for the supply of the poor in this city and the country, there should be one or two stations at least entirely under the control of the Government, in the management of which no private individuals should be allowed to interfere.

971. If the Government were to make it a condition of yielding one-third or one-fourth of the fund in aid of private subscriptions, that it should retain within itself the power of controlling the appointment of the officers, and the number of stations, do you think that any objection would then lie to the machinery of such an institution?—I think that if Government were to retain a power over the appointment to any station, and to give only one-third in aid of its funds, such an institution could not continue. I conceive that if a number of medical men were to associate together, and to fix upon a station, that an aid from Government might be most effectually and beneficially exerted in support of such a private establishment, but that if Government was to make it an indispensable condition of such assistance that they should have a control over the nomination of the vaccinators, then such an institution, half private and half public, could not be supported.

972. If the Government were not to nominate, but were merely to retain in its hands the power of a veto in case of an improper nomination, do you think that would materially interfere with the support given by private subscriptions to such an institution?—Not at all.

973. Supposing that such were the constitution of the society, Government merely reserving in its hands the power of a veto in case of improper nomination, and contributing a sum in aid (say amounting to one-half, one-third or one-fourth) of the funds provided by subscription, do you not think that such an institution would contain within itself both the principle of activity which belongs to institutions maintained by private subscriptions, and that of stability which belongs to institutions certain at all times, as Government institutions are, of not being deficient in funds?—I do: that expresses accurately my own views and feelings upon the subject.

974. Would you be prepared at a future day to state what you would consider to be an efficient establishment for keeping alive a perpetual supply in London of authentic lymph, the number of stations, and the expense of maintaining those stations, including the salaries of the head of the institution and of all the subordinate officers?—I certainly have not at present the elements of such a calculation by me; I could make an estimate, but it would be but a rough estimate. I would do the best I could to make such an estimate, although I am aware that I do not, as a private individual, possess the means of coming to an accurate knowledge on such a point.

975. Is the return, No. 5, which you have made, an authentic return of the funds of the Small-pox Hospital?—It is.

976. From that it appears that the income of the institution, upon the average of the years 1829, 1830, 1831 and 1832, is a little more than 1,000 *l.* a year, and that about

about 800 *l.* of that consists of dividends on invested capital; it also appears, that the expenditure of the institution for the same years has, upon the average, been about the amount of its income; how much of that expenditure, should you state, was applied in support of vaccination, and how much in support of the small-pox patients sent to the hospital department?—It is scarcely possible to divide the one from the other, because the salaries and gratuities given to the officers of the institution, of course, are equally applied in both cases; and the support of the building is the same in both cases.

977. Do you think that any reasonable objections, in consequence of the danger of infection from the small-pox, can be made to vaccination being carried on where it is carried on at your establishment?—I do not think any reasonable objections can be made; and I found that opinion upon the experience of the hospital now of 32 years.

978. Is the vaccination carried on at an apartment quite separate from the small-pox wards?—It is.

979. What is the distance?—There is the distance of two staircases in height; and there is the whole distance of the hospital in length.

980. Are the persons who actually vaccinate practically engaged in the small-pox wards of the hospital?—They are.

981. Do you think any objection lies on the score, that those who vaccinate are actually engaged in the small-pox wards?—I can see no objection, because I have never known, during the 13 years that I have been at the hospital, any instance of a child taking the small-pox who came there for vaccination.

982. Can you state positively, as the result of your experience, that the number of vaccinated patients who take the small-pox after vaccination at the Small-pox Hospital, does not exceed the average of patients who, in general, after or at the period of vaccination, take the small-pox?—Certainly it does not.

983. If a patient is vaccinated at the very instant when he is exposed to small-pox infection, will the vaccine disease come to maturity and protect the patient before the disease of small-pox declares itself in that patient?—A patient may be exposed to small-pox without taking it. If he has imbibed the disease, then vaccination does not produce any effect.

984. Suppose a patient to be exposed to and to imbibe the infection of small-pox, at the very instant when the patient is vaccinated, will the vaccine disease then come to maturity and outstrip the disease of small-pox, so as to protect the patient?—It will do so in some instances, but not as a general law.

985. Which disease should you say would come to maturity first, the two diseases being imbibed by the patient contemporaneously?—The two diseases go on simultaneously.

986. Are there many cases of death ensuing, where, as nearly as you can judge, the period of imbibing the two contagions has been precisely the same?—I have seen many instances of death under such circumstances.

987. Can you, however, state, as the result of your long practice at the Small-pox Hospital, that there is no greater danger to the patients of taking the Small-pox while vaccinated there, than at other places remote from small-pox institutions?—I can.

988. Do you think that the name of the Small-pox Hospital operates to the disadvantage of that institution as a centre for conducting vaccination?—I certainly cannot consider it so, when I reflect that nearly 4,000 persons are vaccinated there annually.

989. Do you think that, looking at the Small-pox Hospital as an institution having already a considerable income from endowments, and being partly supported by public subscription, it would form a bad centre on which to found an institution receiving the countenance of Government, such as you have described in your former answers?—I certainly conceive that much more benefit may accrue to the public from the Small-pox Hospital as a vaccine institution than what it has yet enjoyed, and that it might be one of the stations best adapted for the diffusion of vaccination through London.

990. Economy, and the application of a given sum of money to the best advantage being always an object with all governments, do you not think that if the object be to establish a general institution for the diffusion and promotion of vaccination, it might be done much more economically by taking such an endowed hospital as the centre and nucleus on which to found such an institution, than if you were to proceed entirely *de novo*, and to have an institution entirely separate from another

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already endowed?—I think that it might unquestionably be made of material use. Perhaps it does not become me, as a physician of that establishment, to say that it deserves to be the nucleus.

991. Putting personal considerations entirely aside, looking at it as a measure of wise economy, what would you say?—In an economical point of view, I should certainly say it would be a good arrangement.

992. Can you conceive any disadvantage that would attend such a system?—I can see no disadvantage whatever in making use of the Small-pox Hospital, and the other vaccine institutions which exist in London, in aid of any measures which Government may think it right to adopt.

993. If there are any other institutions in London that derive their support partly from endowment and partly from public subscription, do you think that it would be an unwise principle to put them upon a similar footing to that contemplated in the last question and answer, and allow them to have support in aid from Government, under the limitations before described?—No; I think it would be a very judicious plan.

994. Beside the National Vaccine Establishment, are there any other institutions in London for promoting vaccination, excepting the Small-pox Hospital and the London Vaccine Institution, joined as the latter is with the Jennerian Institution?—I do not know any other which now exists. Mr. King's and the Broad-street did exist, but they are both gone.

995. Do you not think that those institutions would form a very convenient centre upon which to found a general plan for widely diffusing vaccination?—I think that they would most materially contribute; but I do consider that whatever is done, great care should be taken not to interrupt, in any degree, the operations of the great station of the National Vaccine Establishment at Rowland Hill's chapel.

996. You think that where any great stations are already in extensive operation, it would be an unwise plan to remove vaccination from such established stations?—I do.

997. Did you ever hear of any patient who came to be vaccinated at the Small-pox Hospital catching typhus fever from the fever wards that occupy a portion of the small-pox building?—No, I never heard of such a case.

998. Do you know that it is the case that in the leading hospitals in London fever patients, if they do not exceed a certain number, proportioned to the size of the ward, are safely mixed with other patients in the ward not having fever?—I do.

999. If the ward be well ventilated, and the number of typhus fever patients do not exceed a certain amount, as compared with the dimensions of the room, do you not consider that the other patients not having fever in those wards are safe from catching the infection?—I do.

1000. Is not that now an acknowledged fact in the history of the typhus fever?—I believe it is.

1001. Is it not acted upon in all the leading hospitals in London?—It is.

1002. How is the Fever Hospital situated, as compared with the room where vaccination is carried on?—At a very considerable distance.

Mercurii, 27° die Martii, 1833.

HENRY WARBURTON, ESQUIRE, IN THE CHAIR.

Dr. *George Gregory*, called in, and further Examined.

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1003. AGREEABLY to the wishes of the Committee expressed at their last meeting, have you furnished the Committee with an estimate of the scale on which you consider a vaccine institution, re-modeled and under the superintendence, to a certain degree, of the Government, might be carried on?—I have.

1004. The total estimated expense of that for the first year is 1,500 *l.*, and the proposed permanent establishment is 1,200 *l.*?—That is the scale upon which I have made the estimate.

1005. Describe

1005. Describe the different parts of the proposed establishment?—I would propose that the general superintendence of the establishment should be placed in a single officer, to be appointed by the Secretary of State, who, in addition to general superintendence, would perform the duties heretofore assigned to the registrar, inspector and treasurer. I would suggest the propriety of discontinuing the house and station in Russell-place, and three of the least efficient of the other stations, and the continuance of the present office of messenger: the Small-pox Hospital to become the central station for the northern parts of London; the resident surgeon to receive a small remuneration for the additional duties imposed upon him by this arrangement: a grant to be made in aid of the London Vaccine Institution, subject to the superintendence of the Government officer: the establishment at Rowland Hill's chapel to become the central station for the south of London, the salary to be continued on the present scale during the incumbency of Mr. Gilham, provision being had, if such arrangement can be effected, for an additional attendance on two other days of the week: as a provisional arrangement, seven of the present stations of the National Vaccine Establishment to be continued at a somewhat reduced rate of salary, two at one-half, and the others at about two-thirds of their present salaries: small sums to be annually appropriated for the encouragement of vaccine stations in large towns. I have selected in the estimate six of the towns which appear to possess a population adequate to keep up their own supply of lymph: they are Edinburgh, Glasgow, Newcastle, Manchester, Liverpool and Exeter. I have suggested that the sum of 300 *l.* should be granted for the outfit of new provincial and metropolitan stations; for the expenses of the superintendent while engaged in organizing the distant stations; for the purpose also of providing gratuities for such vaccinators as may be reduced under the proposed establishment, and generally for unforeseen contingencies. As a permanent arrangement, I would suggest that two stations be formed in London, on the same plan as that of the Surrey Chapel, one at the east and one at the west end. The nucleus to be the stations which are found on experience to be the most efficient: the salary of such stationary vaccinator to be 100 guineas per annum, for which the vaccinator would provide a suitable apartment, subject to the approval of the Government superintendent.

1006. One hundred guineas for each of the large establishments?—Yes; and a sum of 50 *l.* to be granted as a permanent allowance in the following year to the Small-pox Hospital, in support of its branch stations now contemplated. On the 5th of April 1834, the remaining stations of the National Vaccine Establishment to be discontinued.

1007. The difference between the expense of the first year, and the proposed *permanent* establishment, would arise out of the expenses contingent on organizing the new establishment?—Precisely.

1008. Do you consider that such an establishment would be equal to keeping up vaccination with at least as much certainty and efficiency as the Vaccine Board now performs the same duties?—I do.

1009. With greater or less certainty and efficiency?—I would venture respectfully to suggest, that I think that it would be more efficient.

1010. It comprehends the keeping up of stations at some of the largest provincial towns?—It does.

1011. Whether a permanent and continuous supply were kept up at the provincial towns you would consider not as a matter of first-rate importance, your principal object being to keep up a permanent supply in London?—Yes.

1012. If to that extent the Government were at once to withdraw, or rather to modify, the assistance it now gives in support of vaccination, do you contemplate any injury to the public interest?—None whatever.

1013. You contemplate in this arrangement making the London Vaccine Institution one of the institutions countenanced by a special aid, to a certain degree, from Government?—I do.

1014. Are there only those two private institutions, the Small-pox Hospital and the London Vaccine Institution, which labour to promote vaccination in London?—There are no others.

1015. In case of the proposed establishment, there would then be six principal stations in London, including the London Vaccine Institution and the Small-pox Hospital?—There would be five principal institutions and four small ones.

1016. Which of the existing stations in London would then be discontinued?—The detail of the arrangement must of course be left to the superintendent, acting

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according to the plan which I have suggested. It would be for him to say which are the most efficient of the stations, and which might be dispensed with.

1017. The Small-pox Hospital is sufficiently near to the present central institution in Russell-place, not to render necessary the keeping up of that establishment?—That is my view.

1018. Do you think it would be adviseable and economical to place the Dublin Vaccine Board under the control of the officer of the central institution in London?—I do.

1019. Can you state any instance in which you know, upon good authority, that the central station in Dublin has lost its supply of lymph?—I have reason to know, on good authority, that some years ago this occurrence took place.

1020. Please to state the authority from which you have ascertained that fact, if you have no objection?—On the 18th of February 1831, application was made to me for lymph for the supply of the Vaccine Institution of Dublin, in consequence of that institution being left completely without a particle of matter.

1021. It appears, therefore, that the Small-pox Hospital was the means of renewing the supply of lymph in Dublin?—I am not aware whether our lymph arrived in time to meet the wants of the public; they made application in various quarters, and to the Small-pox Hospital *inter alia.*

1022. But a supply was forwarded?—It was, by return of post.

1023. Upon consideration, you think that a salary of 300*l.* a year would be an adequate salary for the superintending officer of the establishment you contemplate?—I do.

1024. Does that comprehend the whole of the emoluments that you think such an officer should receive, or do you contemplate giving him the advantage of residing in the office?—I certainly contemplate the necessity of an office, at which letters are to be received; and I consider it but fair that an allowance should be made to that officer in lieu of office, if he is not supplied with one from Government.

1025. But do you contemplate the office being also a residence for him?—I think that an allowance in lieu of office would answer every purpose; that he might do all the duties at his own private residence.

1026. Is such an allowance included in your estimate of such an establishment?—It is, as part of the contingent expenses.

1027. Then the Committee are to collect from your evidence that you do not think that so large a sum as 2,200*l.* a year, which is the present grant, is necessary for effectually maintaining the supply of lymph in the central station in London?—I do not.

1028. With an income of 1,200*l.* a year, you would propose, in fact, to do more than they do at the National Vaccine Board, by not only keeping up the central station in London, but also keeping up branch stations in six of the different towns?—I do.

1029. You would contemplate, of course, that, besides the countenance of Government, they should allow the lymph and letters to be sent post-free?—I do.

1030. Is this a correct account of the branch establishments which the Small-pox Hospital proposed to establish in 1831 (*an account being shown to the Witness*)?—Yes, it is.

1031. The keeping of similar establishments to those prescribed in this plan forms a part of the more general plan which you have laid before the Committee?—It does.

1032. This contains the details of such a plan?—It does.

1033. State what were the principal points in the branch stations contemplated by the Small-pox Hospital, which you think would also belong to the branch stations of the proposed new establishment?—The Small-pox Hospital contemplated the establishment of branch stations at Paddington, at Pimlico, at Tower-hill and Spital-fields. Those establishments were to be subject to the superintendence of the physician of the hospital, and generally to be under the regulation of the managing committee of the hospital. The hours of vaccination were to be from ten to eleven o'clock on Mondays, Wednesdays and Fridays. Registers were to be kept upon the plan of those now adopted at the Small-pox Hospital; and persons vaccinated at the hospital might attend on any of the subsequent stages of the process at any district station which might be convenient to their own residences. Quarterly returns were to be sent in, according to the plan here prescribed.

1034. You

1034. You stated in a former answer that your institution had applied to Government for permission to send lymph free of postage?—Yes.

1035. Do you know how Scotland is supplied with lymph?—I believe almost entirely from England.

1036. Are you aware whether applications have been made for establishing a Vaccine Institution in Scotland?—There have.

1037. Has it come to your knowledge what grounds have been made for objecting to it?—I have heard generally stated two grounds; first, that the present establishment is adequate to the supply of all the wants of Scotland; and secondly, that the amount of the Government grant is not sufficient to authorize the formation of branch provincial stations.

1038. According to your opinion, as stated in your observations on the proposed plan, the amount of the Government grant is more than adequate to support not only the London establishment, but also a branch establishment in Scotland, together with other provincial establishments also?—Always providing that Government gives the additional facility of free transmission of postage.

1039. Would not the supporting of a branch institution in Scotland very much reduce the number of transmissions of lymph from London?—I should presume it would.

1040. And tend to diminish the number of double letters?—I should presume so.

1041. Do you think it conducive to the public good that practitioners who vaccinate on a large scale should see much of the small-pox?—I think it is desirable that they should take every opportunity which may occur to them of acquainting themselves with the different varieties of small-pox.

1042. Would you extend that observation not only to small-pox but to all cutaneous disorders?—Yes.

1043. Will you state particularly the reasons which lead you to that conclusion?—Because there are a variety of cutaneous diseases which interfere with the process of vaccination, and it is not uncommon for vaccination to assume the character of such cutaneous diseases, which may have pre-occupied the surface.

1044. What do you know of an experiment which is said to have been made of impregnating the surface of a blanket with small-pox, wrapping up a cow in that envelope, and communicating to the cow the vaccine disease?—The original experiments are reported to have been made at Bremen by Dr. Sonderland; they will be found reported in Hufeland's periodical publication. The experiments were repeated carefully at the Small-pox Hospital the year before last, under the superintendence of the surgeon of the Veterinary College, Mr. Sewell. The experiment was performed with every attention to accuracy, but no result whatever followed.

1045. Was the experiment made more than once?—Only once.

1046. Then you do not consider it, according to the present state of medical knowledge, as a medical fact that rests upon any authority?—I should say none whatever.

1047. Do you believe that experiment at Bremen to have been the origin of the supposed theory, that the vaccine disease is small-pox communicated from the human patient?—It is not the origin of the theory; the theory was originally broached in 1800, or in 1798, by Dr. Jenner; but it is one of the few experiments which have ever been made with a view of determining the point.

1048. But you believe that that is the experiment which must be referred to by any person who states that small-pox is capable of being so communicated to the cow, and of originating the vaccine disease?—I know of no other.

1049. Is it possible by any examination of the points or glasses that contain the vaccine lymph, to distinguish such lymph from the dried serum of the blood, or even from a small quantity of glue?—No, it is not.

1050. Then a correct preparation of the points and of the glasses must depend upon choosing a vaccinator of knowledge and character; and no examination of such preparations by a medical board can ensure their efficacy?—Not in the slightest degree.

1051. Nor can ensure that they are really vaccine lymph?—Certainly not.

1052. You said that you were acquainted with the proceedings and practice of the Small-pox Hospital before you were appointed physician to it in 1822?—I was.

1053. You said that vaccination was introduced into it in the year 1799?—It was.

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1054. Did not the institution carry on the practice of vaccination and of small-pox inoculation for many years indiscriminately?—Promiscuously. The two went on together up to 1808.

1055. Are you aware of any cases having occurred at that time in which mistakes were made in the distribution of the matter?—I am.

1056. Was that before you were physician or after?—Very long before; it was in the winter of 1799–1800, in the very infancy of the practice.

1057. The question alludes to the matter that was sent to Petworth?—Yes.

1058. The consequence was, that small-pox was administered instead of the vaccine disease?—It was.

1059. Were not those mistakes a great impediment to the progress of vaccination, and to the satisfaction of the public mind with regard to the practice?—Unquestionably; it was a source of considerable uneasiness to the persons who were at that time interested in vaccination.

1060. You have seen and practised of course extensively in the small-pox?—I have.

1061. Do you not consider that disease to be infectious in the highest possible degree?—Certainly.

1062. Perhaps the most infectious disease with which the human frame is affected?—I do.

1063. More so than typhus or any description of fever?—Yes.

1064. May it not be communicated by clothes, or by persons having intercourse with the small-pox patient, to others?—I do not say that it may not; it may certainly; but I am not aware that it is under common circumstances communicated by clothes.

1065. What number of persons have died of small-pox in the bills of mortality within the last year or two?—Upon the average 700.

1066. What proportion do deaths by small-pox bear to the number of those who contract it?—One in three. I speak of the natural small-pox.

1067. So that the total number of persons affected might be one and twenty hundred?—About that.

1068. Are not those liable to be sent to your hospital?—They are, if objects of charity.

1069. Small-pox occurs chiefly among the poorer class, and therefore it may be considered that almost all of them are liable to be sent to your hospital?—A large proportion are liable to be sent, but the proportion actually sent is small.

1070. How many beds does your small-pox hospital contain?—We could make up 50 beds if it was required.

1071. What is the average number of small-pox patients that you have at one time?—Fifteen.

1072. What is the greatest number that you have known within the last two or three years at one time?—Thirty, within the last few years; within the last two or three years.

1073. What is the period of the year in which you have most small-pox patients generally?—It varies very greatly; I cannot name any one season.

1074. Do you not think upon the average of years you would find it more prevalent at one time of the year than at another?—I have drawn up such a table, but I can derive no general law from it.

1075. Supposing all the beds in your hospital, or nearly so, were full, is it not reasonable to suppose that the atmosphere of the whole building would be so infected with the effluvia of the disease, as might render it dangerous for persons unprotected attending there?—No, I do not think there would be any danger, even were the hospital so full as that; of which, however, I see no reasonable chance.

1076. Is it not the case, that the effluvia of small-pox may be carried to a considerable distance?—I am not aware of the distance to which the effluvium may be carried.

1077. Have you any pupils at your hospital?—There are not any now.

1078. Do you vaccinate the patients yourself?—Yes, I do.

1079. Do you take any precautions after attending a small-pox patient before you proceed to vaccination?—None, but the ordinary precaution of washing the hands.

1080. How many nurses are there employed in the institution?—From four to six, according to the number of patients.

1081. How many porters and other attendants?—One.

1082. Does he reside in the house?—He does.

1083. To assist in conveying patients to the wards?—Yes.

1084. When persons bring their children to be vaccinated, what intercourse can take place between them and persons employed in the hospital?—None whatever.

1085. Except with yourself or the person who performs the operation?—Except with myself and the resident surgeon.

1086. What are the regulations of the hospital with regard to the intercourse of the nurses and the attendants; are they confined to the hospital, or are they at liberty to go out?—They are, as far as practicable, confined to the hospital.

1087. Is there not always a chance of the vaccine operation failing to produce the protective disease?—There is.

1088. That failure may arise from causes which imply no particular insusceptibility of the patient to small-pox?—Certainly.

1089. You said that no instance had occurred, to your own knowledge, of small-pox taking place with regard to a person who had attended for the purpose of vaccination?—Various instances have occurred of persons brought to the Small-pox Hospital to be vaccinated in consequence of the small-pox being in the house or immediate neighbourhood. In such cases it has been found that the persons who have attended for the purpose of vaccination have occasioanlly taken the small-pox.

1090. To be satisfied as to those cases, is it not highly necessary to watch the consequences of the operation?—Certainly.

1091. What means do you take to procure the attendance of patients for that purpose?—They attend of their own accord, and most willingly.

1092. You do not experience much difficulty in that?—None whatever.

1093. Have you observed any cases of small-pox mixed with vaccine disease to have occurred in such patients?—I have never seen such in attendance on the vaccine department of the hospital. I have seen persons brought into the hospital with the small-pox, having been previously vaccinated at other institutions.

1094. To what institutions do you refer?—To private vaccinators, or other sources of vaccination in London.

1095. You said that the chance of successful performance of vaccination was less in winter than in summer?—Yes.

1096. Is that on account of the cold acting on the surface of the body?—Precisely so, I imagine.

1097. Such a cause as that would not diminish the susceptibility of taking small-pox by inhalation into the lungs?—I presume it would not.

1098. So that persons resorting to the Small-pox Hospital for the purpose of vaccination in winter would have a less chance of acquiring the protective disease, while at the same time they would encounter the full risk of catching the small-pox?—I do not know that they encounter any risk of catching the small-pox.

1099. Whatever the risk may be, they have the same degree of risk in winter as in summer?—Precisely.

1100. While the chance of acquiring the protective disease would be less in winter than in summer?—Yes.

1101. You said that your mode of vaccination was by several deep incisions in the arm?—By several incisions.

1102. Such as are followed by a flow of blood?—Yes.

1103. Are you aware that that is not the mode practised at all by the vaccinators of the National Vaccine Establishment?—I am not aware of the mode that they pursue.

1104. Is it not possible that the matter might be lost in consequence of the effusion of the blood; that the blood effused might carry it out with it? I think not.

1105. Have you ever observed considerable inflammation in the arm after the operation?—The true or specific inflammation of the arm.

1106. But none in consequcnce of the mode of operating?—None.

1107. Were not there a greater number of patients admitted into the Small-pox Hospital in the year 1825, than for a considerable time previously?—There were.

1108. Did not some circumstances occur at your hospital in that year which were such as to create a suspicion with regard to the efficacy of vaccination?—Not more than have occurred since.

1109. Was not there a statement made to the effect that twelve persons had died of small-pox after vaccination?—Yes.

1110. Did they die at your hospital?—Yes.

1111. Was

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1111. Was there not an inquiry instituted by authority of Government in consequence of that statement?—There was.

1112. By whom was that inquiry conducted?—By the Duke of York.

1113. By what medical officer?—Sir Henry Halford superintended as medical officer.

1114. Was the ground of that inquiry the uncertainty likely to be produced in the public mind by such a statement?—I believe it was.

1115. What was the result of that inquiry?—That the report of the Small-pox Hospital, together with the report of the National Vaccine Establishment, were circulated very extensively over the country.

1116. With regard to the subject of the inquiry, did it appear whether those persons had been vaccinated or not?—Yes.

1117. Were they properly vaccinated?—That remains always a doubt.

1118. Did it appear how they were vaccinated, or by whom?—It appeared that they were vaccinated, and there was reason to suppose that some of them were carelessly and ineffectually vaccinated.

1119. Was not the result such as to put it beyond all doubt that those persons had not been properly vaccinated?—No; it was only a strong presumption.

1120. Had any of them any mark on the arm of vaccination?—Yes, they had, several of them.

1121. Where had they been vaccinated?—In different parts of the country.

1122. When you say the country, had any of them been vaccinated in London?—No; none of them had been vaccinated in London.

1123. But some of them it did appear had been carelessly vaccinated?—There were strong grounds of suspicion with regard to some of them, but that was all.

1124. Was there any certainty with regard to any of them that they had been properly vaccinated?—There was the same degree of uncertainty which exists in most other cases where intervals of 20 years or thereabouts elapse from the date of vaccination.

1125. Without referring to the medical men who actually vaccinated the patients, and obtaining all the evidence of the fact, is it not extremely difficult, by mere inspection of the patient many years afterwards, to give any opinion whether he has had the real disease or not, whether he has been well vaccinated or not?—It certainly is extremely difficult.

1126. Did you ever entertain any doubts yourself as to the sufficiency of vaccination against the disease?—Certainly; I have had many doubts as to the efficiency of it in the terms originally stated by Dr. Jenner, but no doubt whatever as to the inestimable blessing of vaccination, and the urgent necessity of doing everything that can be done to perpetuate vaccination, to improve it to the utmost of our power, and to extend it.

1127. But you do not consider it a protection to the extent that he supposed it?—Precisely so.

1128. Is that your opinion still?—Yes.

1129. That is, that there will be found many cases of individuals, from causes unknown, in which small-pox does occur after the patient has undergone the real vaccine disease?—Precisely.

1130. Did Dr. Jenner suppose that no such case did ever occur?—He originally (in 1798) and for many years afterwards, entertained that opinion.

1131. Do you consider it of equally frequent occurrence with the occurrence of small-pox, after either the inoculated or the casual small-pox?—I consider that there is greater chance of taking small-pox after vaccination than of taking small-pox after having once undergone the small-pox.

1132. Do you mean the inoculated form or the casual?—Either.

1133. You think the inoculated person is the safer of the two?—Yes; that is to say, he is safer from a *second* attack than a vaccinated person is from a *first*.

1134. Is there any difference in the liability of the constitution to a second attack of small-pox after inoculation, and after undergoing the natural disease of small-pox?—That is a point upon which physicians still continue and have for years continued to differ.

1135. There being that difference of opinion, is it not probable that the liability is nearly the same, if not quite?—I presume it is.

1136. Have your opinions on that subject undergone any change since 1825, since that inquiry to which you have referred?—No, they have not.

1137. You

1137. You have stated that you thought 300*l.* a year would be a sufficient reward for the person under whose superintendence the institution, according to your proposed plan, should be placed?—I did.

1138. Would he not have to forego all private practice?—I did not anticipate the necessity of that.

1139. Do you think it would be necessary that such a person should forego all private practice?—No, certainly not.

1140. He could efficiently perform the duties of his office without foregoing other practice?—That is my opinion.

1141. It would depend of course upon the extent of his practice?—Of course.

1142. Would not such engagement occupy a very large proportion of his time?—It would occupy a certain number of hours in the day decidedly.

1143. Do not you think that there is a danger that he would make a second object of the concerns of the institution, since a gentleman must be supposed to be desirous to extend his private practice as much as possible?—I think that the remuneration of 300*l.* a year would induce a man to give a large portion of his attention to it.

1144. But the 300*l.* a year would be a certain fixed salary, whereas the private practice would depend upon the exertions he made?—True, but the eyes of the public and of the profession being upon him, it would be his interest as well as his duty to pay great attention to that portion of his daily labours.

1145. Do not you think that a transfer of the resources derived from Government in support of vaccination from the present establishment to your hospital might be construed into an abated sanction on the part of Government of vaccination, and produce a confusion in the public mind with regard to the two diseases?—I have not contemplated the transfer of the duties to the Small-pox Hospital, nor would I recommend any such plan.

1146. Do you contemplate the transfer of the resources of Government to a different establishment, of which the Small-pox Hospital should be the centre; and the consequent doing away of the present establishment?—No; that can hardly be regarded as the outline of the plan which I have suggested; the support to be given to the Small-pox Hospital in the plan proposed by me would be exceedingly small indeed; because I think the Small-pox Hospital is in possession of nearly all the funds that it can require.

1147. You stated that the committee of your hospital were to have the regulation of those matters, did you not?—Only of their own stations.

1148. Was the Small-pox Hospital to be one of those stations?—Yes, a station sanctioned by Government; the sanction of Government would be given to it in common with other stations.

1149. Do you not think that that circumstance might tend to produce a confusion in the public mind with regard to the two diseases?—I cannot think so by any means, when I remember that 1,400 medical gentlemen applied to the Small-pox Hospital last year for vaccine matter from our establishment.

1150. You said that when the Dublin Institution lost their lymph, they applied to your hospital; are you aware whether they applied also to the national establishment?—I have no reason to doubt that they might, but I am not certain of it.

1151. Was it during the winter that that supply failed?—Yes, it was in the winter they failed, from severity of frost, when any institution is liable to fail.

1152. You said you have known cases of persons being vaccinated at your institution, and taking the small-pox soon after; did you not?—No, I did not state that; I said that I had known instances of persons being brought up to the institution for vaccination after having been exposed to the disease, and having imbibed it. They were brought to the hospital to take their chance of vaccination; but having imbibed the disease of small-pox, they went through it.

1153. You stated, in a former answer, as the result of the practice of the Small pox Hospital, that no greater number of patients were found to take the small-pox, during the period of their undergoing the vaccine disease there, than was the case, on the average, at other institutions for supporting vaccination?—I did. I beg permission to state an instance which will illustrate my meaning, more especially as the subject is important: One child, of a large family, was brought as an in-patient to the Small-pox Hospital, having small-pox full out upon her; the remaining children of the family were brought upon the following day to take their chance of vaccination, they having, with one exception, been exposed to the disease from their sister; they were all vaccinated; but every one had imbibed the disease except

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one, who had been staying at an uncle's; that one took the vaccination; but all the others took the small-pox, and suffered severely from it.

1154. You said that you found no unwillingness, on the part of the mothers, to bring their children, that they might be watched in the subsequent stages of the process?—None whatever, excepting during the winter months, when the severity of the cold keeps them back, but no unwillingness from any other cause.

1155. Do you think that the stations might be diminished; is it not part of your plan that the number of stations should be diminished in London?—It is.

1156. But those stations which you would retain would all of them be made stations of the first importance?—All efficient stations.

1157. When you stated that, in the early practice of vaccination at the Small-pox Hospital, mistakes had occurred whereby the patient was inoculated with small-pox, and not with the vaccine disease, does not this show the great importance of vaccinators being practically acquainted as well with small-pox as with the vaccine disease?—It does.

1158. Is not that the best security against similar mistakes being made in future?—The very best.

1159. Does it not also show that it is extremely desirable to keep the two diseases perfectly distinct?—Yes.

1160. It was asked whether mistakes did not occur, and whether patients were not inoculated with small-pox. In those cases to which you have alluded, were there pustules of small-pox and cow-pox at the same time?—There were, in some of the instances, both present at the same time; in others, it was entirely small-pox. They were an unfortunate set of cases, which I believe have never occurred since.

1161. Were those persons patients in the Small-pox Hospital, or were they out-door patients who had been brought to the institution to be vaccinated?—Out-of-door patients, who had been brought to be vaccinated.

1162. Where they imbibed the small-pox you do not know?—I do not know.

1163. Is there any proof of the small-pox having been given in those cases at the Small-pox Hospital?—None.

1164. What is the nature of the correspondence that you have forwarded to the Committee?—I forwarded to the Committee selections from the correspondence of petitioners to the Small-pox Hospital, requesting a supply of lymph. I have divided them into letters from town practitioners, letters from suburban practitioners, and letters from country practitioners. I have taken a few of those which have occurred since the 1st of January 1832.

1165. In your proposed plan, how many hours a day do you contemplate that each stationary vaccinator should attend?—I contemplate that each of the vaccinators at the four principal stations should attend three hours in the day.

1166. You said that you did not consider vaccination to be an equal security to the occurrence of small-pox against the attack of small-pox?—I apprehend that the security is somewhat greater by once undergoing small-pox.

1167. Do not you think that persons might be induced to resort to inoculation who entertained that opinion?—Some persons entertaining that opinion might certainly be induced to resort to inoculation; but such opinions would not induce me to resort to inoculation.

1168. Coupling the danger of dying of the inoculative small-pox with the chance of having the natural small-pox after inoculation, which of the two methods do you think affords the best chance of escaping death by the small-pox; the practice of vaccination, or the practice of inoculation?—I say, decidedly, the practice of vaccination.

1169. You are not prepared to state numerically, and in the way of a per-centage, in what degree inoculation affords a better security against small-pox than vaccination does?—No; I have attempted to estimate that, but I have not been able to come to any satisfactory conclusion; for this reason, that the two things do not admit of a fair parallel. The object of inoculation is to *give* small-pox; the object of vaccination is to *prevent* it.

1170. Is the opinion which you have stated, one concerning which you entertain considerable doubts, or would you be prepared to say that it is a fact, that inoculation, upon the whole, is a more certain preventive for casual small-pox than vaccination?—I am prepared to state as my decided opinion, that vaccination does not give a security against one attack of small-pox, to the same degree that undergoing the disease by inoculation does against a second.

1171. But

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1171. But in what degree, as a per-centage upon the whole number of cases vaccinated, you are not prepared to state?—I am not.

1172. In both cases would not the proportion as a per-centage be very small?—I am not prepared to say how large that per-centage is in the case of either the one or the other.

1173. Upon what grounds do you form that opinion, that vaccination is a less security than inoculation?—From the fact, that small-pox after vaccination is much more common than small-pox after small-pox, both in the practice of the Small-pox Hospital, and generally in the experience of the existing race of practitioners, and as recorded in works.

1174. Is not the disease of small-pox after successful vaccination very greatly modified, and generally cut short at the period when, if the patient had not been vaccinated, he would be subject to the greatest danger?—Yes, it is, in a very remarkable degree.

1175. The opinion which you have stated does not in the least degree diminish the high opinion that you entertain of the utility of vaccination?—In no degree whatever; and I may mention, as the strongest proof that I can give of it, that I have vaccinated my own child.

1176. Do you consider that you are rather singular in that opinion, or is that an opinion generally entertained amongst medical men?—I believe that such is the general impression among medical men of the present day.

1177. Is it the general impression that inoculation is a better security to a person in after-life than vaccination?—I think that is the general impression among medical men; but then it is carefully to be taken into account, that you insure having one attack of the disease by inoculation, whereas, in the other case (by vaccination), you run a very good chance of having no disease at all.

1178. Have you any pupils in your hospital?—No.

1179. Does the plan of your hospital include pupils?—Yes.

1180. It might occur that you would have pupils?—It might occur, but there have not been any applications made by gentlemen for admission.

1181. If you had such pupils, would it not be desirable that they should become acquainted with the practice of vaccination, as well as the practice of small-pox?—Yes. The object of the institution in permitting pupils was to diffuse a knowledge of vaccination, and to extend the practice of it as far as they could.

1182. Would there not be an intermixture of the persons vaccinated and the pupils, if there were such in the hospital?—Yes.

1183. Are not the facilities of learning vaccination so great that it is hardly necessary for a pupil to attend at the Vaccine Institution for the purpose of learning it?—No; on the contrary, I think it would be most desirable that every pupil in London should be compelled by law to attend a vaccine institution for some time.

William Lowe Wheeler, Esq., called in; and Examined.

W. Lowe Wheeler, Esq.

1184. YOU are Resident Surgeon to the Small-pox Hospital?—I am.

1185. Do the poor come in considerable numbers to your institution?—In very large numbers.

1186. Are they vaccinated gratis?—They are vaccinated gratuitously, for the most part.

1187. State what you mean by that qualification "for the most part"?—When patients receive vaccination at the hospital, and their means appear to allow of it, a small book is put into their hands, which they are requested to purchase for the hospital's benefit.

1188. Then it is a voluntary contribution when they do pay?—Yes.

1189. It is not demanded of them?—By no means.

1190. When it appears that the patients are of that class of life that they can afford to contribute a trifle towards the support of the hospital, they are asked to pay a small sum in the purchase of the book of the hospital?—Yes.

1191. Have you found that many of them do so contribute?—No; a very small number.

1192. What is the sum that you receive in that way?—I think that last year perhaps 20 *l.* might have been received; but I cannot say without looking at the account.

1193. It is at the option of the party what he will contribute?—Quite so.

1194. Do you know of any circumstances attending the Small-pox Hospital

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which induce so large a number of poor to attend there to have their children vaccinated?—It was so when I was first elected; large numbers always assembled there when I was first chosen.

1195. They attend there in large numbers, although in the immediate neighbourhood there is one of the largest stations of the National Vaccine Board?—I believe the central station used to be in Percy-street, but now I believe it is removed; but I cannot say.

1196. Do not you know that it is now in Russell-place?—I know that the Percy-street establishment did exist, but I have never passed that way lately; and I do not know whether the central station is there.

1197. Is there a considerable demand for lymph by country practitioners from your institution?—Yes.

1198. Do you confirm Dr. Gregory's statement to the same effect?—In every particular.

1199. What means do you take in order to supply this large number of applicants for lymph?—We collect vaccine lymph by glass from patients who are in attendance there, and supply persons when the application is made to us.

1200. How many years have you been resident surgeon to the Small-pox Hospital?—Thirteen years.

1201. During that period have you ever failed to keep up the vaccine disease, and in consequence have you been obliged to go to some other source for obtaining a fresh supply?—I am certain the supply has always been kept up by us.

1202. Would the objects of your institution be very much promoted by having the privilege of sending lymph postage free?—Very considerably indeed.

1203. Can you state, of the 1,400 applicants during the last year for lymph, how many were from London practitioners, and how many from country; how many charges of lymph had you to send into the country during the last year?—No, the distribution has not been classified at all.

1204. Would it take you much trouble to make that classification, and show what number of charges you have sent into the country?—It could easily be done.

1205. If you were to make that classification, could you state what the cost to the hospital for sending the number of charges into the country may have been?—Yes; but if the Committee will allow me to say, I do not conceive that the distribution of cow-pox matter puts the hospital to any considerable charge at all; I should think that 4 *l.* or 5 *l.* a year would comprehend it. The hospital can only be charged with the use and the grinding of lancets and square pieces of glass, printed letters and wrappers, and ivory points; and I should think that an outlay of certainly from 5 *l.* to 10 *l.* a year would meet all that expense.

1206. If you had to supply a larger number of applicants than you now supply, it would be necessary, in order to do so, to have other large stations in other parts of the town, would it not?—Certainly.

1207. The principal expense, therefore, consequent upon your having to supply a much larger number of applicants, would be in multiplying the number of large stations in other parts of the town?—That would be the principal expense.

1208. It is impossible to multiply beyond a certain amount the applicants at any particular station, so long as there continue to be stations employed by other institutions in other parts of the town?—Yes.

1209. Do the applications for children to be vaccinated principally come from those who live within a certain distance of each institution?—They come to us in the immediate neighbourhood of the hospital in very considerable numbers; I should say in greater numbers, but occasionally children are brought by their parents very considerable distances from the hospital.

1210. Can you state any instances in which you have supplied lymph to any practitioners of the National Vaccine Board?—I think it has been done on one or two occasions.

1211. Of late?—I cannot say of late; not to my knowledge.

1212. What were the circumstances attending those applications?—On one or two occasions my friend Mr. Ward, of Wellclose-square, has applied to me.

1213. The supply may be lost without any blame being imputable to the vaccinator, may it not?—Quite so. Mr. Ward's station was a very considerable one, a very essential one, and I cannot say that he applied to us because he was out of lymph, I merely say he applied.

1214. Do you know of any applications from the vaccinators of the Vaccine Board, where the applicants were wholly out of supply?—I do not.

1215. Have

1215. Have you seen the return which has been made to this Committee by Dr. Gregory, containing the plan of an establishment for the promotion of vaccination?—Yes, I have.

1216. Do you concur with Dr. Gregory in opinion that that would be an efficient establishment for keeping up a constant supply of vaccination, and for diffusing lymph over the country?—I think it would be found very efficient.

1217. Do you think it would be more or less efficient than the present National Vaccine Board for the same objects?—I am induced to think that it would be quite as efficient.

1218. Do you think it would be more or less efficient in diffusing vaccination through the country?—That would depend upon the transmission of lymph postage free.

1219. The plan does contemplate the gratuitous postage; it is presumed that the same privilege is given to the new establishment which is given to the National Board: taking that into consideration, and also that part of it which contemplates, in addition to the London stations, the having six branch stations in six of the largest towns or cities in the country, do you not think that that would very much contribute to the diffusion of vaccination?—Certainly, there can be no doubt of it.

1220. As far as that part of the plan goes, would it not be more efficient than the present Vaccine Board?—Yes, certainly.

1221. Do you think that, with the sum allowed for that purpose, of 1,200*l.* a year, the duties proposed to be assigned to the new establishment could be efficiently performed?—I should think they could, provided that *bonâ fide* services only were remunerated.

1222. What is the mode of vaccinating in practice at the Small-pox Institution; do you make a somewhat deeper incision than is in use with some vaccinators?—I think I do; I think it is done both by Dr. Gregory and myself.

1223. Is it on principle that you do so?—Quite so.

1224. Will you give your reasons for that mode of practice?—I think that when the surface of the skin is merely grazed, the chance of taking effect is less than in case of insertion. I feel more doubtful, far more uncertain, than when I make a deeper insertion into the subject's arm.

1225. Can you state, from the experience of your institution, that vaccination does not fail more frequently in taking effect under your mode of vaccinating than it does where the incision is more superficial?—I have some reason to think that our success is very fair, is very considerable.

1226. Do you mean by very considerable that it is greater or less than the success attending other modes of practice?—That is a question which I am not able to answer.

1227. Have you an opinion whether it is equally successful with other modes?—I prefer it.

1228. Then it is to be presumed, if you prefer it, that you think it is at least as successful as other modes?—More successful.

1229. Does the mode you practice lead to a considerable effusion of blood?—The blood trickles down the arm in drops occasionally.

1230. Is the patient much inconvenienced, and put to much pain by the operation?—No; I should say but slight. Children on receiving vaccination will cry at being pained; they are young animals, and their sensations are easily excited.

1231. Is that from alarm or from pain mostly?—I do not think that at the ages at which we vaccinate some of our children they can be susceptible of the feeling of alarm.

1232. Do you think, from the experience of vaccination at your establishment, that a greater number of your patients take small-pox cotemporaneously with vaccination than is the case with patients vaccinated at any other institutions with which you are acquainted, in consequence of the small-pox being communicated either from the small-pox wards or from the medical men who attend at those wards, and are also the vaccinators?—I believe that no ill effect has ever arisen from it.

1233. You do not believe that a larger per-centage of those vaccinated take the small-pox cotemporaneously with vaccination at your institution than is the case elsewhere?—No.

1234. If that had been the case, do you think you should have heard of it?—I am satisfied we should.

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1235. Have you kept any register of the number of cases in which the patients vaccinated at your institution have taken small-pox during the progress of the vaccine disease?—There is no list of that kind kept, no such case having ever occurred within my knowledge.

1236. You do not keep a register of those who are subject to your inspection during the progress of vaccination?—We do; and we should register a case of small-pox if any were to occur.

1237. If small-pox had occurred in any patient during the progress of the vaccine disease, would that fact appear upon your register?—It would.

1238. Can you state positively that a large number of those vaccinated at the Small-pox Hospital do not take small-pox during the progress of the vaccine disease?—The number of failures among our vaccinations is small; and I remember no case of small-pox occurring to a child during vaccination at the hospital.

1239. Did you ever hear of any considerable number of the children vaccinated at your establishment taking typhus fever in consequence of the contiguity of a fever ward?—No, I never heard of any such thing.

1240. Do you know that in the larger hospitals in London the fever patients are safely mixed with the other patients, if the number does not exceed a certain proportion, as compared with the size of the ward?—Yes.

1241. Do you know that to be the practice in the leading hospitals in London?—I do.

1242. If the ventilation is good, and the number of typhus fever patients does not exceed a certain proportion, may they not be safely mingled with the other patients?—I think they may. It is a constant practice in one large hospital, I mean St. Bartholomew's; they are very liberal in their admission of fever cases there, and I believe it was the practice that those cases were allowed to come into the hospital without any letter, or without waiting for the admission day. They considered it almost as an accident, and admit it with as much freedom and ease as if a man were to tumble down and break his leg.

1243. What is the distance of the room where the children are vaccinated at the Small-pox Hospital from the fever ward?—I should think it was 150 feet or 200 feet.

1244. Are there free currents of air between the fever ward and the vaccinating room?—Quite so.

1245. Do you consider it morally impossible that the children brought to be vaccinated at your institution should receive the infection of fever from the fever ward?—I do.

1246. Did you ever hear of a case of fever communicated to any one of the vaccine patients, traceable to the infection from your fever ward?—Never. I would take the liberty of saying that the Small-pox Hospital and Fever Hospital are two distinct establishments.

1247. Do you or Dr. Gregory in general vaccinate patients?—The duty devolves upon us both.

1248. In what sort of proportion; is it committed to you chiefly, or to Dr. Gregory?—I should think the larger part of the patients were vaccinated by myself.

1249. Do you bear the same testimony with regard to the willingness of persons to come a second time after vaccination?—Quite so.

1250. You find no difficulty in watching the subsequent stages of the process?—Not the least.

1251. Is it registered in any book which you keep who it is who vaccinates, whether you or Dr. Gregory?—No, but we can tell by custom; I can tell a patient which I have vaccinated myself.

1252. In the register that you keep of the patients vaccinated, do you mention the name of the vaccinator?—In a number of instances it is done.

1253. It is not an invariable rule?—No.

1254. Do you attend the small-pox patients as well as those that are vaccinated?—I do.

1255. If you have been in attendance upon a small-pox patient, before you proceed to vaccinate, do you take any precautions to prevent infection?—I merely wash my hands before I leave the ward.

1256. You do not change your clothes?—No.

1257. You say that you consider your success to be very fair with regard to producing the vaccine disease?—I have reason to think it so.

1258. Did

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1258. Did you ever hear of instances of ineffectual vaccination by the National Vaccine Establishment?—No.

1259. Have you any reason to suppose that their practice is in any degree ineffectual?—I know a few of the vaccinators connected with the Vaccine Board; I would instance my friend Mr. Ward, and I believe he is as able a vaccinator, and as successful a vaccinator, as you can possibly expect to see.

1260. Is his mode of practice the same as yours?—I have never seen Mr. Ward vaccinate a patient.

1261. Did you ever hear it suggested that an effusion of blood must frustrate the operation?—Under certain circumstances it is not desirable; the appearance is bad, and that has a little effect; it may excite the feelings of the parent.

1262. But does not an effusion of blood carry the matter along with it, and by that means frustrate the operation?—No; I think that when the vaccine lymph is inserted into the arm of the patient, it is as much the tendency of the absorbent vessels of the part to act upon the matter to which it is exposed, as it is of the blood-vessels to bleed.

1263. Do you think it is impossible that the effusion of blood can have that effect?—I think it is; the ordinary feeling is, that the effusion of blood would wash the matter away; but I do not think that that is the case.

1264. The result of your experience is, that as far as your practice goes, that is not the case?—That is not the case.

1265. But sometimes the operation fails?—It will fail under some circumstances.

1266. But you do not know that it fails more frequently in your case than in the case of vaccinators who vaccinate in a different mode?—Certainly not; I should decidedly give the course which I have pursued the preference; I have tried other modes, and I prefer that of making a fair and bold puncture.

1267. Among the patients who attend a second time, who have been vaccinated at the hospital, have you ever observed anything like small-pox, either simply or mixed with the vaccine?—I am sure that we have never observed any such cases.

1268. Do you think it would be as safe to mix small-pox patients in the ward of a hospital with other patients, supposing those other patients not to have been protected from the disease, as you have said it would be in case of typhus fever?—It would be wrong.

1269. Do you consider that small-pox is a more infectious disease than fever?—I should think it was.

1270. Is there any disease to which the human race is liable, which is equally infectious with small-pox?—Yes, I should think that measles, and hooping-cough, and scarlet fever were; I should suppose, as far as I am able to judge, that they are all equally quick in being imparted by contagion.

1271. Are you aware of any complaints ever having been made from the large towns of the want of vaccine establishments in those towns?—I am not.

1272. Are you aware that there was correspondence from Edinburgh on the subject?—No; that does not fall within my province to the extent that it does the other officers of the hospital.

1273. When the vaccine patients call during the progress of the disease, to enable the medical officers at your establishment to know whether the disease is going through its stages successfully; is that fact registered?—It is.

1274. When you send charges of lymph, do you keep any register from which you can ascertain from whom the lymph was taken?—No, we do not; our register is very simple at present.

1275. Would not that involve a great deal more of writing labour, and make it more expensive than it now is?—It would be more expensive; and I do not know that it would be of any use.

1276. The medical officer judges whether it is the authentic form of the disease in the patient, and sends it accordingly?—Yes.

James Clift, Esq., called in; and Examined.

James Clift, Esq.

1277. IS that an account of the branch establishments that is forwarded by yourself, [*an Account being shown to the Witness*]?—It is.

1278. Is that a correct account of the branch establishments which the Small-pox Hospital proposes?—It is.

1279. That Account, No. 6, and the other money accounts which accompany this,

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this, are correct returns from the Small-pox Institution?—Yes, from the records of the hospital.

1280. What are your duties as secretary?—To summon all the meetings; attend those meetings; keep all the accounts of the hospital; and from time to time do the various matters relating to the institution, and all the correspondence.

1281. From whence has the Small-pox Hospital been able to accumulate the sum invested in the funds?—From legacies from time to time, and contributions and savings that have arisen from the economy of the establishment.

1282. Can you form any estimate how much of your income goes to the support of the small-pox ward, and how much is devoted to the support of vaccination?—We have no separate account with regard to the vaccination department, and that of the small-pox; the whole accounts at present are intermixed; I cannot say, therefore, the proportion.

1283. Is there anything relating either to the disease or to the financial part of your institution which you wish to state to the Committee?—I am not aware of anything except that in order to the extension of vaccination by the hospital, the governors have from time to time given that subject consideration, and with a view to extend, as they conceive, the increasing benefits arising from the vaccination at that hospital, they did take into their consideration the establishment of branch stations, and it fell to my lot to issue advertisements calling upon persons to make application who were desirous of being appointed. A number of those applications have been received, and out of those, four persons, intended to be adopted as four branch vaccinators in the four quarters of the town, were selected, and it is under consideration to appoint those four gentlemen, subject to those regulations which the Committee have before them. Added to this, I think we have had applications from the country also, particularly from Exeter, where there is a great desire to have a branch establishment; but inasmuch as our committee have deemed it only necessary first to commence in London, in the four divisions of London, and so go on increasing from time to time over the kingdom, they deferred appointing anybody in country stations.

1284. What was the calculated cost of those branch establishments on the scale laid down in the paper you have submitted to the Committee?—There has been no estimation of the expense attending them, because it was intended, if the funds of the hospital would afford it, to do all that was necessary out of those funds, but not to allow to any of the vaccinators any allowance of pay, nor, in the appointments that it was intended to have made, did the subject of remuneration to them ever come under consideration.

1285. It was intended that they should first perform the duty gratis?—Yes.

1286. Did you find any respectable practitioners willing to perform that duty gratis?—Yes, certainly.

1287. Was there more than an adequate number?—Yes, we had to select out of a roll of applicants.

1288. Would not there be some credit attached to the appointment?—We considered so, from the number of applicants; those four whom I have named were selections from the lists, and selections after inquiry as to their respectability.

1289. They were highly respectable persons?—They were considered so.

1290. Was any intimation given to them that after a time the hospital might pay to them a certain salary?—Not officially.

1291. Was there an expectation on their part that after a period, if the funds of the institution would allow it, they would receive some small salary from the institution?—It was considered, that as their duties would increase, their time should not be absorbed without remuneration.

1292. Was it intimated to those gentlemen that they would be expected to conform to the rules of the Small-pox Institution in their practice?—Yes, according to the regulations to be laid down by the Hospital, a copy of which regulations have been handed in to the Committee.

Dr. *John Epps*, called in; and Examined.

Dr. *John Epps*.

1293. WILL you state what situation you hold at the London Vaccine Institution?—I hold the situation of Medical Director and Vaccinator to that institution and the Royal Jennerian Society.

1294. How long have those institutions been established?—The one, the Royal Jennerian Society, was established in 1803, and the London Vaccine in 1806.

1295. When were those two institutions consolidated?—In 1813.

1296. Does

1296. Does this Account, No. 9, returned from that institution, give a correct account of the period when the two institutions, as regards vaccination, were first established?—Yes.

1297. For how long a period have you accounts of the number of persons vaccinated by the separate or consolidated institutions?—Ever since their commencement.

1298. Were the papers that originally belonged to the Royal Jennerian Society transferred to the united institutions?—I cannot answer that question.

1299. Was not Dr. Walker the officer at the head of the Royal Jennerian Society?—He was.

1300. Did he continue an officer of the institutions after their consolidation?—Yes, till his death.

1301. Until what year did he remain the officer of the united institutions?—Until 1830, when he died.

1302. Did you then succeed him?—I succeeded him.

1303. What other stations have the united society at present?—The first station is Union-court, Holborn-hill; the other is 18, Providence-row, Finsbury-square; and the third is St. John's Vestry-room, Horselydown.

1304. Does the Account, No. 2, give a correct account of the number of charges of lymph supplied by you, and the number of applicants?—Yes.

1305. How is it that there is no return of the number of applicants in 1831 and 1832?—On account of the governors having passed a resolution that no applicants should have vaccine matter except through their order, or by being governors of the institution; and consequently the applications have come through wholesale chemists principally, who are subscribers.

1306. Is it through your institution that the chemists and druggists principally receive the supply that they require?—Yes.

1307. Do you know what the practice of the chemists and druggists is; whether they sell a supply of lymph to the practitioners; and, if they sell, what it is they charge?—No; we have no doubt that they make the supply of vaccine lymph to their correspondents a means of recommending themselves in reference to their business; they applying for country practitioners their correspondents, whom they supply with matter which they send down to them in their parcels, and thus save postage to those gentlemen in the country.

1308. Do you believe that they supply gratis in return for drugs, or that they make any charge for the supply?—I should think from the respectability of the persons that they do supply gratis.

1309. Are not a very considerable proportion then of the subscribers to your institution druggists and medical men in London?—Yes.

1310. Do you know whether from the first period of the institution of the two separate societies, so long as they continued separate, they were able to keep up a continuous supply of lymph independent of the supply from any other institution?—Perfectly so; more especially as Dr. Walker was vaccinator to both when separate.

1311. Since they have been consolidated, have they kept up an independent supply of lymph?—Quite so; perfectly.

1312. Then has the effect of the order issued by the governors of your institution been rather to limit the number of applicants than to increase it?—Yes.

1313. The number of applicants has been diminished, but the number of charges supplied appear not to have diminished materially?—No.

1314. Are a very considerable number of wholesale chemists in London subscribers to your institution, and do they derive their supplies of lymph from you?—I should say almost all the wholesale chemists in London are subscribers to our institution.

1315. Do you mean to say that the whole 40,000 charges of lymph that you supply now go through the hands of the chemists?—No; we have 210 and upwards of medical men in London who are subscribers, and we have applications from the country to a very considerable extent; but then the latter have to pay postage coming and postage returning.

1316. If the supply goes through a chemist the probability is that they do not incur the expense of postage?—No, not at all.

1317. Do you supply a considerable number of persons, either public officers in any British colony or dependency, or person applying on the part of foreign governments?—Yes, we supply great numbers.

 1318. Are

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1318. Are the instances given in the return correct?—Yes, quite correct.

1319. Have you supplied any persons at any foreign British stations for a series of years?—Yes, at St. Helena and at Berbice, and at several parts, of which we have no regularly preserved documents, because we have not preserved them any further than to file them, and we have no means of reference.

1320. Are there any vaccine institutions in any of the British dependencies that you are in the habit of supplying?—Yes; there is an institution at Quebec, which is a branch institution of our institution, and we receive a yearly account from them of the number of persons vaccinated by them, and we supply them with matter.

1321. Are there any of the West India colonies that you supply, and through what channels do you principally supply them with lymph?—I should think we supply almost all the West India colonies, and through West India merchants resident in this country.

1322. Do you make monthly supplies to any foreign governments?—Yes, to four.

1323. State which they are?—We supply the Buenos Ayres government fortnightly, and the Brazilian fortnightly, and we supply the Columbian and the Mexican.

1324. Have you ever supplied the French government?—We supplied the French government for several years.

1325. What was the cause of your discontinuing that supply?—I am sure I do not know what was the cause.

1326. Have any complaints ever been made of the inefficient supply?—No; the secretary and myself transmitted a letter to Prince Talleyrand, to request him to have the kindness to state whether he had any ground of complaint. No answer has been received, though about a month has passed since the date of the said letter.

1327. Do you know where they now obtain their supply from?—I have heard that it is from the National Vaccine Board, but I do not know that it is true; in fact, I do not know whether they need a supply.

1328. Have you ever supplied the Spanish government?—Yes.

1329. Independently of any supply that you afforded to the French government, are you in the habit of transmitting vaccine matter to any places in France?—Yes, to Calais and Bologne continually.

1330. Are you in the habit of transmitting lymph to any place in the Pacific Ocean?—Yes, to the Sandwich, and to many other islands.

1331. Regularly, at intervals?—Generally through merchants who go there.

1332. Is it when they apply for lymph that you give it them, or do you exert yourselves to induce them to take out a supply?—The custom, before the funds of the institution were so low as they are now, was to employ a man to go down to the river side, and to give matter to captains of ships, desiring them to present that matter to the medical officers at the ports to which they voyaged.

1333. Does the Belgian government subscribe to your institution?—Yes.

1334. And receive supplies?—Yes.

1335. Do you supply any part of Africa with lymph?—Yes; the Cape Coast Castle, and other places on the coast of Africa, we supply.

1336. Have you supplied the East Indies?—Yes, we send matter to the East Indies; the East India Company are governors to the institution, and subscribe.

1337. Do many dispensaries or workhouses in London or in the country subscribe to the maintenance of the institution, and receive supplies?—Yes.

1338. Will you instance any?—We have the Shoreditch Workhouse; there is a workhouse in the Strand, of which Mr. Stanton, I think, is the surgeon; we have also the Birmingham General Hospital that we supply, and the Ipswich Dispensary. There are several other institutions in the country that we send matter to, and they subscribe.

1339. Is there any part of Scotland that you supply?—The Island of Mull we have frequently supplied, and some other distant parts of Scotland; and we have to speak of the kindness of Sir Francis Freeling in forwarding our letters to such very distant parts, free of postage.

1340. Has Sir Francis Freeling attended to any applications that have been made by your institution for the privilege of sending your letters post-free?—He has to those distant places, such as the Island of Mull and other distant places; when there are large supplies to be sent, he has kindly assisted us in that respect.

1341. Is No. 3 a correct account of the income of your institution for the last five years?—Yes.

1342. It appears that it was lowest in 1831, and that since it has gradually recovered?—Yes.

1343. Does the city of London subscribe to your institution?—I think it subscribed 100*l.*

1344. Is the whole income of your society applicable to the support of vaccination?—Yes.

1345. And the larger proportion of the whole you state to be for medical men, or chemists and druggists?—Yes, the great proportion of the persons supplied are medical men, and wholesale chemists and druggists.

1346. Have you ever made application to the Post-office, or through the Government to the Post-office, for the privilege of transmitting your lymph and your letters relating to vaccination free of postage?—Not to my knowledge, and I believe on this ground, that we had the privilege once, before the National Vaccine Board was established; and it was then taken away for some grounds that I do not know, as I was not connected at all with the institution at the time.

1347. Do you think that the establishment of a vaccine board, which is supported wholly by Government money, and not at all by subscriptions, has the effect of rendering the public less disposed to subscribe in support of a vaccine institution?—Decidedly; I should, as an individual, decidedly think it would be very injurious to the cause of institutions if Government were to grant any support to one institution.

1348. Do you think there is such a demand for lymph, and such a desire of medical men to keep alive the authentic form of the vaccine disease, that there is no danger of the disease being lost, if the means of keeping it alive are not afforded by the Government grant?—Not the least danger.

1349. Do you think it would be an expedient plan if the Government were not to take upon itself the sole cost of supporting such institutions, but were to give a grant in aid, upon condition that the larger proportion of the funds necessary for each institution, say two-thirds or three-fourths, should be provided by subscription, and that it would give the third or the fourth itself in aid of the funds of such institution?—I think that if Government were to support any institution of the kind, it should support it wholly, or else leave the institution wholly to the charitable tendencies of the public.

1350. Do you think that the countenance or authority that it would give by granting a moderate contribution in aid would assist at all in raising, in the opinion of the public, the practice of vaccination?—No, I do not think it would; for the persons whom we vaccinate are persons who never know what grants Government give.

1351. It appears that the number you vaccinate at your several stations amounted in 1832 to 5,641?—Yes.

1352. If your funds were increased without increasing the number of your stations, should you be able to vaccinate a greater number than you do at present?—I do not think we should at these stations that we have; we have increased 1,000 last year, and I think we may increase at that rate; but I do not think we can increase at the rate that we could if we had another additional station in a different locality. I trust, from past experience, we shall increase a thousand every year, even with only our present stations.

1353. Is your institution wholly supported by subscription?—Yes.

1354. Does it require much exertion on the part of your officers to collect that sum of 600*l.* a year?—I should think the greatest exertions.

1355. Has your institution ever been in danger of being dissolved for want of funds to support it?—It was, previous to that regulation that medical men, in order to obtain supplies, should either bring letters from governors or be governors themselves. In fact, the state of the funds was the reason why that regulation was adopted.

1356. Do you feel quite satisfied, from its being the interest of medical men to keep alive the disease and to support the institution, that they will continue to subscribe in support of your institution?—I am perfectly convinced they will, if this institution and the rest be allowed to stand upon the same basis.

1357. What do you mean by the same basis?—For example, suppose this institution were to remain as it is, and the others were to have Government support, and also the privilege of sending their letters and charges post-free, we could not expect to have a continuance of support if the medical men could obtain matter from the others for nothing.

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1358. If the privilege of transmitting lymph and sending letters post-free were given to you, should you have any doubt of being able very largely to extend the means that you take for promoting vaccination, without calling upon Government for any grant in aid?—Quite so; we should be perfectly satisfied with that privilege.

1359. What stations do you yourself attend?—I attend them all.

1360. Do you yourself vaccinate?—I myself vaccinate.

1361. Do you vaccinate and attend all those stations as vaccinator, or are you inspector?—As vaccinator, I attend those stations.

1362. Are there any subordinate medical men who vaccinate under your superintendence?—No, I vaccinate entirely myself, and no one officer vaccinates but myself.

1363. How do you divide the stations?—I vaccinate at two stations in every day of the week, excepting Saturday; at Union-court at 12 o'clock; at Providence-row, Finsbury-square, at half-past one; and then on Mondays at St. John's, Horselydown, at half-past three.

1364. How long are you at each station?—It occupies upon the average about an hour at each.

1365. What salary do you receive from the institution for that attendance, &c.?—£. 100 a year.

1366. Has the number of persons vaccinated increased or decreased since you were attached to those institutions?—They have increased a great deal; at least when we compare them with the preceding years.

1367. What are the reasons why the governors of those institutions require your daily attendance at those stations?—Because in no other way can we ensure the supply of matter; neither could we see the progress that the children made in reference to the vaccination in any other way.

1368. Do you consider daily attendance essential to the objects which vaccine institutions have in view?—Certainly; it is absolutely necessary that daily attendance should be given at some stations.

1369. Have you at all times in the year a supply of the vaccine virus?—At all times.

1370. By what means do you enforce the attendance of the patients during the progress of the disease?—By kindness; and, I should state also, that we give the parents a printed paper, pointing out the importance of bringing the child back; and we also give them a certificate at the end of the fortnight, which states to them whether the child is secure or not.

1371. Do you find that the large proportion of the patients are brought back to be inspected?—Yes.

1372. At the different stages?—Yes.

1373. How often do you expect and desire that they should attend?—Twice; they must attend on the seventh day from the day when the child is vaccinated, and then in a fortnight from the time he is vaccinated.

1374. You take no bond or any pecuniary security that they will attend?—None at all.

1375. Would that be expedient?—No, it would not.

1376. Are the children brought by their parents from great distances?—Very great distances.

1377. Are there any of the institutions of the Vaccine Board in the immediate neighbourhood of your stations?—I believe there are branch institutions, but I do not know, some persons put up "National Vaccine Institution," who I believe have no right to put it up; but I believe no one institution, to my certain knowledge, appointed by the National Vaccine Board, is in our neighbourhood: but we have children brought to our stations from distant parts, although in these parts there are the recognized stations of the National Vaccine Board. In fact, they pass continually the stations of the National Vaccine Board to come to our institutions at miles distant from their homes. We have, for instance, many from Ilford; Tottenham, Edmonton, Bow, Homerton, Paddington, Camberwell, Peckham, Croydon; also from Barking in Essex, and also from Bromley.

1378. The return which you have made contains a correct account of the number of charges that you distribute; what is the form in which you principally distribute those charges?—Glasses, on points and in crusts.

1379. Do you distribute the vaccine matter in crusts for the home distribution, or do you confine that principally to foreign stations in hot climates?—To foreign stations,

stations, for the residents at those stations specify that they cannot obtain the vaccine matter perfect, unless it be sent in the form of crusts.

1380. When you send supplies to foreign countries, what number of charges do you send, or what number of crusts?—Generally from a dozen to 20.

1381. Who was the person that first proposed the transmission of matter to foreign countries, particularly in hot climates, by means of crusts?—I think I may say, without any hesitation, that it was our secretary, Mr. Johnston.

1382. Had it not been tried or proposed before?—Not so far as my knowledge of the history of vaccination extends.

1383. Do you transmit the vaccine matter exclusively in that form to hot climates, or do you send it in glasses?—We send it in glasses *wrapped in tinfoil.*

1384. When you send a supply to practitioners in the United Kingdom, of what cost is it to them for postage?—The postage depends necessarily upon the distance, but it is double postage always.

1385. You now supply no medical practitioners in the country but such as are either recommended by governors or as subscribe?—Except where they state the case as peculiar; for example, the applicants themselves may be just beginning their profession, and where it is for the poor; if it is exclusively for the poor, then we send it whether the applicants are subscribers or not.

1386. Do persons who apply to you for the most part, not only pay the postage, but also incur the expense of subscribing to the institution?—They do.

1387. What reasons can you give why they should incur those expenses of both subscribing to your institution and paying the postage, when they may obtain the supply from the stations of the Vaccine Board gratis?—I am sure I cannot say; they must have great confidence, it is evident, in the matter we do supply, or else they would not be at that expense.

1388. All you can say is, that there is a considerable number of practitioners who do give this preference to the supply obtained from you, which costs them something, to the supply which they obtain from the stations of the Vaccine Board gratis?—Yes, quite so.

1389. Does the Apothecaries' Company subscribe to your institution?—They do; three guineas a year.

1390. Is the number of charges with which you supply them considerable?—Very considerable.

1391. Do you know whether they apply exclusively to your institution?—I am sure I do not know.

1392. Are any of the professional men who subscribe to your institution of very long standing as subscribers?—Very long indeed; some of 20 years, I should say.

1393. Have you any decided testimonies in favour of the vaccine matter that you supply, in addition to the circumstance that persons prefer paying money for the charges that you supply to them in preference to obtaining them gratis from the National Board?—We have decided testimonies from practitioners in the country who use our vaccine matter in preference to any other; but they do not make any comparisons, to my knowledge.

1394. Do you think that an institution could entirely support itself without any Government grant, if it simply had the privilege accorded it of sending and receiving charges of lymph and letters post-free?—Yes, if no other institution had Government support.

1395. You think that an institution, simply receiving the countenance of Government to that extent, would be able, without any grant of money, to maintain itself?—Quite so.

1396. Do you think that such an institution would ever thrive, simply receiving that privilege?—Yes; and if I might be allowed to state the great reason why it could not thrive if a grant was given by Government to any other society is, because people imagine that the society is supported by Government; and so great is the ignorance in this respect, that even a person who continually sees me, who has vaccinated for me for a week, who was one of my pupils, believed, till within the last fortnight, that I was connected with the National Vaccine Institution, and that the London Vaccine Institution was supported by Government.

1397. With simply the grant of that privilege, you think that your institution might supply the whole country with vaccine lymph?—I have no doubt of it; especially aided by the Small-pox Hospital, which also distributes supplies.

1398. You think that the subscription to your institution from practitioners in the country would be very greatly increased if the grant were withdrawn from the

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present Vaccine Board, and you had the privilege granted you of sending charges of lymph post-free?—I think so.

1399. Would it not be just that in case of your receiving such a privilege, the Government should limit the amount of subscription which you should receive from a medical practitioner, as the condition of sending charges of lymph in return for any applications he might make?—I cannot give an opinion at once on such a question, as it embraces a very difficult point to give an opinion upon; but when I bear in mind the fact, that whenever matter is wanted for the poor, there is no hesitation in sending it, (if a person states, for instance, that he is parish surgeon, and vaccinates the poor, and wishes for a supply, the vaccine matter is sent), I am inclined to conclude that such a requirement on the part of Government is not necessary; more particularly as the governors give to me and to the secretary a considerable latitude in regard to the non-enforcement of the regulation of supplying none save subscribers.

1400. Is it not just that the Government should see that the subscription which should entitle an applicant to a supply of lymph should not exceed a certain amount?—I can hardly give an answer to that question. The feeling of the governors connected with such an institution would be to render the subscription as moderate as possible. I believe that many persons receive supplies of lymph from our institution who subscribe only half a guinea a year, when they are unable to give more.

1401. Does this printed account give a correct statement of the subscribers to your institution?—I should imagine so.

1402. Do you know what number of medical men in the country, and what number of chemists there are in that list?—There must be upwards of 30 wholesale chemists in that list; the number of medical men subscribing is upwards of 210.

1403. Is there a considerable number of medical men in London who subscribe?—A great many in London.

1404. Have you ever had stated to you the reason why they prefer obtaining their supply from your institution at a moderate expense, to applying at the stations of the Vaccine Board?—They have not been able to obtain it at the stations of the Vaccine Board; they have often stated that in their applications to us.

1405. Do you mean that they have been refused the supply altogether, or that there is much delay in affording the supply?—There might not be matter at the time when they called; and there is another circumstance, that many do not know where to find the stations of the Vaccine Board.

1406. Do you think that there is a greater regularity on your part in answering the applications of those who have a tie upon you, and are the best supporters of your institution, than there is in answering applications on the part of the Vaccine Board?—I should say there is, from the principles regulating the common relationships of life.

1407. Does your Institution publish yearly reports?—Yes.

1408. Has it done so for a series of years?—Ever since its establishment.

1409. As a medical man, have you ever derived much instruction as to the nature of the disease, the anomalous cases of it that occur, and the proportion of cases of small-pox that occur after vaccination, from the publications of the National Vaccine Board?—None at all.

1410. Are you aware of the modes of vaccination practised at the stations of the Vaccine Board?—No; I know nothing in regard to their practice in that respect.

1411. Do you think that there is anything peculiar in the mode of vaccination practised at any of the stations in London, either supported by the Vaccine Board or other institutions?—The Small-pox Hospital make a greater number of incisions in the arm than other institutions do; at least than we do. I cannot answer for the National Vaccine Board.

1412. What is the mode of vaccination practised at your institution?—We make one incision in each arm, sometimes two, but generally only one in each arm.

1413. Is there any interval between the period at which you make the separate punctures?—We make the punctures on the same day, and in immediate succession.

1414. Is it a superficial or a deep incision that you make?—It is superficial; it is not at all deep seated; we wish to penetrate only between the surfaces of the skin, *i. e.* the coats of which the skin is composed.

1415. Have

1415. Have you any account of the number of persons that have been vaccinated by the practitioners who have received from you a supply of lymph?—No; we keep no regular account, except occasionally they may send an account.

1416. Is the number of charges supplied by you in the last year upwards of 43,000?—Yes.

1417. Does this account marked (A.) contain a correct account of the progress of the society since its institution?—Yes; as far as I have been able to collect.

1418. With the simple privilege given you of forwarding your communications post-free, you think such great encouragement would be given to your institution, that you would be able, from the mere increase of subscriptions, supposing the National Vaccine Board no longer to receive its grant, to supply the increased demand which would arise from the whole country?—There is no doubt of it.

1419. Have you ever considered what number of stations it would be expedient for you to have for the purpose of keeping up a supply for such increased demand?—I should think that, with the Small-pox Hospital retaining its present station, and having one more station in Westminster, and one at the northern division of Mary-le-bone, sufficient provision would be made for all the purposes of vaccination. I should state, that there are two stations which I have heard are efficient, and that is in the neighbourhood of Dean-street, and Mr. Gillham's over the water. When looking, however, to the numbers vaccinated by the Vaccine Board, also to the number of recognized stations, and of paid vaccinators, I must doubt the efficiency of any, more particularly in relation to the expense attached.

1420. What do you calculate to be the cost of the principal stations at which you vaccinate; and what additional cost does each additional station entail upon your institution?—Very trifling. We believe that a fine building is not at all desirable for the purpose; the poor people will not come into what may be called a respectable house. Dr. Walker observed this fact. We think the poor are much more willing to come into houses in appearance correspondent with their own situation of life than into what are called respectable massive buildings; and therefore the expenses of a fresh station we consider to be very trifling.

1421. Would there be any objection, on the part of your institution, to furnish a detailed account of its expenditure for one or two years?—I should think not the least.

1422. There already existing, at the expense of 800*l.* a year, a staff to your institution, the increase of expense arising out of an additional number of stations would by no means increase in the proportion that your present number of stations would bear to the increased number?—No, certainly not.

1423. Can you state what you think each additional station, upon the same scale as your principal stations, would add to the annual expenditure?—Not more than from 40*l.* to 50*l.* each.

1424. What should you think a fair remuneration to each stationary vaccinator as a salary?—I do not think that each station needs a vaccinator; that is not at all necessary.

1425. How many stations should you propose that any one vaccinator should attend?—He might attend, I should think, at least six in the day.

1426. You think that one individual vaccinator could attend six stations for an hour each probably?—Yes, making six hours altogether, including travelling between the stations.

1427. What do you think would be the adequate remuneration to that individual?—I should think 300*l.* a year.

1428. He of course must give up a very large portion of his practice?—He must do that.

1429. Which do you think would be the best organization of an institution having the conduct of vaccination, to have one principal medical officer as inspector, and a number of stationary vaccinators, or to have a very limited number of vaccinators, attending many stations in the course of the day?—I think one attending the several stations would do, for he would and must be the inspector, for the same time would be taken in inspecting as in vaccinating; in fact, the separation of office is a distinction which would be open to the greatest difficulties and objections. There might be a collector of the vaccine virus for the Post-office, and he need not visit every station, because the vaccinator could leave the matter at the principal station, which, in his round, he might visit last.

1430. Which

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1430. Which of the two plans do you think would be the most economical plan?—I should say making the inspector and vaccinator the same individual.

1431. Do you think that it would be expedient to extend that attendance at one station beyond an hour a day?—Not at all; an hour a day is quite sufficient for all the purposes which a person has to perform, that is, if he is exact to his time.

1432. At what cost do you think such an institution as you contemplate, provided the present Vaccine Board were to cease to receive its grant, grafted upon the present London Vaccine Institution, could be supported?—A thousand a year.

1433. It would not exceed a thousand a year?—No.

1434. Do you make notes, in the register that you keep, of the number of cases in which small-pox occurs after vaccination, as far as you are able to ascertain?—We see little or nothing of the children after they are vaccinated and have received their certificates.

1435. Can you state what is the proportion of cases when you vaccinate in which small-pox occurs during the progress of the vaccine disease?—I should think there are no cases but the cases which Dr. Gregory has mentioned, where the parents are frightened by any of their children being taken with the small-pox, and they bring their other children to be vaccinated, thinking it may prevent the disease. In many cases it does not prevent the disease, for the disease has been previously taken, but it modifies it and mitigates it in almost every instance.

1436. If vaccinating and imbibing the infection of small-pox were to be in the same patient precisely cotemporaneous, would the vaccination afford protection to the patient before the small-pox disease had run its course?—That is a very important question, and the answer could be given if we could settle as to the cotemporaneousness of the application of the small-pox infection, and the vaccine virus. When that particular point can be proved, then that question can be answered definitively. We published a correspondence that we had last year with a Dr. Fansher, in Connecticut, in America, wherein he proposes to facilitate the the vaccine influence upon the system, so as to anticipate small-pox influence, by vaccinating in different parts of the body; and he gives a number of cases in his correspondence, wherein, I believe, that practice has been effectual. Cases where persons, having been exposed to the influence of small-pox, were, after such exposure, vaccinated in different parts of the body; and Dr. Fansher has thus succeeded in preventing the development of the small-pox.

1437. Do you believe that the vaccine disease will outrun the progress of the small-pox; that it will be so rapid in its progress as to prevent the full development of the small-pox, if the two diseases be taken cotemporaneously?—If the observations of Dr. Fansher are generally found to be true, I should say yes.

1438. Do you know anything of the experiment said to be made of communicating the small-pox to a cow, and the disease resulting therefrom being found to be the vaccine?—I have heard of Dr. Sonderland's, of Bremen, experiments upon that subject, but I do not think that the verification is as yet made out. Dr. Sonderland, at Bremen, was the first person, as far as I know, who tried the experiment.

1439. Do you attach much importance, as it affects the opinion which the English public entertain of the value of vaccination as a preventive to small-pox, to having a body of high medical officers to superintend the practice of vaccination?—Not in the least.

1440. Is not the result of a successful practice for a series of years, and the publication of such results, the best mode of raising, in the opinion of the public, the value of vaccination as a preventive?—Quite so.

1441. Have you come to any calculation as to the per-centage of cases, in proportion to the whole number of cases vaccinated, in which small-pox appears after vaccination?—No, I have not; but the numbers are extremely few, at least that come to our knowledge. There may be cases; and there is one circumstance preventing an accurate judgment upon the point, namely, that many of the parents do not come back with the children vaccinated, and, therefore, although vaccinated, we are not able to certify to their protection; indeed I have never known a case where (a *certificate of security* having been given at our institution) small-pox has occurred; and I believe that many cases of small-pox, said to occur *after* vaccination, have been of those who have not been brought back for examination, the parents foolishly inferring that, because a *tumour* arises upon the arm where the incision

incision was made when vaccinated, that the said tumour is the true vaccine tumour, when sometimes it is not.

1442. Are you a doctor of medicine?—I am.

1443. Where did you obtain your diploma?—At Edinburgh.

1444. Are you a licentiate of the Royal College of Physicians?—No, I am not.

1445. The London Vaccine Institution is called the Royal Jennerian Society?—They were two separate societies, but they were united in the year 1813.

1446. It has assumed that title?—Yes.

1447. Do you know that the original Royal Jennerian Society was dissolved?—I believe it was dissolved in 1806, but I am not certain.

1448. Do you know on what account it was dissolved?—I do not; there were a great many disputes I heard, as a matter of history, but I was not at all connected with it then.

1449. Do you know upon what authority this institution is called the Royal Jennerian Society?—It was resuscitated, if I may so say, by the life governors of the original society, called together on the 17th July 1813, by *public advertisement*, also on the 27th of July of the same year. The meeting, on the latter occasion, was held at the City of London Tavern, Dr. Bradley in the chair.

1450. Do you know whether any application was made to Dr. Jenner to sanction it?—Dr. Jenner was elected president of this resuscitated society; he was written to by Dr. Bradley, who took a very great interest in it, begging him to take the head, and he declined. His answer is, "Although it must be evident that every institution, which has for its object the extension of vaccine inoculation, must have my best wishes for its success, yet, for reasons which, on reflection, must be obvious, you must see the impossibility of my accepting the proffered appointment."

1451. He positively declined to become president?—Yes.

1452. And still the title of the Royal Jennerian Society was assumed?—Yes.

1453. Was not Dr. John Walker one of the promoters of this institution?—He was a principal promoter of this institution at its *first* establishment, and one of the greatest blessings to this institution and to the world.

1454. Was it not in consequence of deviations from the Jennerian system that it was dissolved?—I do not know regarding this sufficiently, but whatever was Dr. Walker's system, it was productive of the greatest public benefit, and was attended with the greatest possible success.

1455. Did Dr. Jenner object to it?—I do not know that he did as an individual. The difference between Drs. Jenner and Walker is thus stated in the archives of the College of Physicians, London: "Two different modes have been adopted in taking the matter of inoculation from the vaccinated subject; one, by making punctures round the outer part of the pock; the other, by removing the crust or scab from the centre of the pock, wiping out the fluid beneath it, and then taking the matter indiscriminately from any part of the whole substance of the pock. These two different modes are used by men eminent in vaccination: the former by Dr. Jenner, the latter by Dr. Walker."

1456. In what manner has your institution been supported?—By voluntary subscriptions entirely.

1457. Was it never the practice to send round the reports of the institution to various individuals, offering them a diploma and the vice-presidency if they subscribed?—I am sure I do not know.

1458. Nothing of that sort has taken place since you have been connected with the institution?—Not to my knowledge; I do not have anything to do with the management of the institution, except with the medical department.

1459. Do you think that there is any discredit in doing so, as the objects of the institution are charitable?—It is not perhaps professional, but there is nothing discreditable.

1460. Is it not by sending round persons to collect, that very many charitable institutions are supported?—No doubt of it.

1461. You say that many persons prefer to apply to you instead of applying to the National Vaccine Establishment?—I should infer so.

1462. Have you ever heard the efficacy of the lymph of the National Vaccine Establishment questioned at all?—No, I never heard much about it.

1463. You said that persons applied to you because they could not procure matter from the National Vaccine Board?—Yes, and many have been up to the west end and could not find the place where this matter was obtained; in fact,

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I have been at a loss myself to direct individuals, and I do not at the present time know where the chief vaccinator resides.

1464. Do you think a lesser number of stations would be sufficient than there are at present for vaccination?—I am sure of it.

1465. Do not you think that if the number of stations were diminished, the difficulty of finding one would be increased?—Not at all. One of the stations where I vaccinate, Union-court, Holborn-hill, happens to be one very much out of the way of the public appearance, and we have a very great number of poor people attend that station, coming from the west end of the town. We have no difficulty in reference to our stations.

1466. Is there a greater facility in discovering your stations than those of the national establishments?—They are well known; they have been long in existence: the one in Union-court for 25 or 20 years at least, and the others at St. John's, Horslydown, since 1803, the first establishment of the Jennerian society.

1467. You say you have a good many applications from druggists in the country?—No, from druggists in London, for country practitioners.

1468. Do not you think that such persons might be tempted to apply to you for matter, in order to disguise the facility with which it might be had from the National Establishment, that it might be forwarded to the country in parcels, and the vendors thereby gain more credit, and enhance the price of it?—No, not in the least; I do not think that such a thought could enter their minds, for if the vaccine matter could be obtained with such facility at the National, why should not these druggists apply.

1469. There can be no druggists in London who are not fully acquainted with the National Establishment?—I should think not; yet we have Allen and Corbyn, and the first druggists in London, who apply to us.

1470. You never make any charge for the separate supply of lymph, but you require that those whom you supply in general should subscribe?—Yes; for instance, Messrs. Gale, Baker & Ward, who subscribe, may send for a dozen glasses of the matter for their country practitioners whom they supply with drugs, but who do not subscribe to our institution.

1471. Do not you think that a medical institution, supported by voluntary contributions, might be liable to fail in proportion as the authority under which it was managed was liable to question?—I only judge from the facts that I know. Our institution has had pure vaccine matter, and this I have no hesitation in stating; and in addition, that any institution, if conducted upon the same principles, will ensure the most efficient matter.

1472. You said that you thought that the inspector and the vaccinator might be the same individual?—Yes, any person who knows anything of vaccinating must be convinced of the same; for as much *time* and *attendance* required for *inspection*, would be required for *vaccination*.

1473. Do you think there would be sufficient security afforded for a good practice?—Yes, if they select a proper person.

1474. It would depend upon his character and sincerity entirely?—Yes.

1475. Would there be any difficulty in selecting from the medical men persons able to perform those duties?—A person can hardly go wrong in vaccination. Many ladies, Lady Fane and others, and many clergymen, vaccinate.

1476. Such a person would be able to have very little private practice, would he not?—His private practice would be very limited if he has to attend those six stations.

1477. Do you imagine any man who had attained great eminence in his profession would consent to forego his private practice to take upon him this office?—Not entirely forego it, because his eminence would bring him into a private practice, he would have a private practice in vaccination. It would not exclude him from that, or from any kind of practice, so long as he attended to his public duties.

1478. Is there anything in the nature of the vaccine disease which in your opinion requires the superintendence of a Board composed of very eminent medical men?—No, not in the least.

1479. And at such salaries as are stated in the paper?—No, I do not consider that there is the least necessity for it.

1480. Would it be necessary with respect to the person who was to vaccinate at those different stations that he should be a man in very large general medical practice?—No, I think that it would be rather objectionable; if he were engaged in *general* practice it would be impossible that he could attend regularly.

1481. You

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1481. You think it desirable that he should have a knowledge of all cutaneous diseases?—He should have a knowledge of his profession.

1482. Do you think it particularly desirable that he should have a knowledge of the small-pox and other cutaneous diseases?—There is no doubt of it, because he has abundant opportunities of throwing light upon the subject, and the more he knows, the more capable will he be to detect deviations, and to throw light upon cutaneous diseases; but I do not consider it of much importance in reference to vaccination itself.

1483. He would be an incompetent man in judging of any anomalous forms of the disease if he were not acquainted with any other disease than the vaccine?—Yes, but vaccination is a matter so simple, that a person can hardly go wrong.

1484. And you think that out of the body of medical practitioners, there would be no difficulty, at a salary of 300 *l.* a year, in engaging men of high character to perform those duties which you have assigned to your vaccinators, as you have described?—I think there would be no difficulty at all.

1485. You repeat, that the giving the privilege of transmitting lymph post-free would be quite support enough to afford to any institution, if greater privileges were not granted to other institutions?—Quite so.

1486. Do you think that that privilege of transmitting letters post-free should be given exclusively to your institution, or that a similar privilege should be given to other institutions having the same object?—Certainly not; they all should have the same privileges.

1487. With an equal security as to the nature of the lymph?—I do not know what is meant by security; the only security to be obtained is from the knowledge of the persons who use the lymph. There are only three institutions in existence, and those three have existed some time; and it must be concluded that the lymph they send is good, otherwise those whom they supply would not continue their applications.

1488. Is there any other point upon which you have not been examined that you would wish to state to the Committee?—I would certainly wish to state the fact, that I consider that the institution to which I have the privilege of belonging is certainly one which ought not to be injured by any grant being given to any other institution, while this institution is left to stand upon its own basis. In regard to vaccination, I do not consider that there is the least possible necessity for any medical board to exist in order to ascertain the purity of the lymph and keep up a supply. That is the firm conviction that has been impressed upon my mind, from reading the various papers that have been laid before the public, and from an experience obtained in the vaccination by *my own hands*, during the last two years and a half, of upwards of 10,000 individuals.

1489. Did not the London Vaccine Institution many years ago, at a period when the first grant was given to the Vaccine Board, petition Parliament that they might, if any other Board received a grant, receive a grant likewise?—They petitioned that no grant should be given, stating that it was the best way to leave the institutions to stand upon their own basis, and to be supported by the charitable.

1490. Your mode of practice differs in some degree, you stated, from that followed at the Small-pox Hospital?—In so far as making two incisions; whereas, I understand, at the Small-pox Hospital, that they make a greater number of incisions.

1491. Does your mode of operation produce an effusion of blood?—Sometimes it does, sometimes it does not; it is impossible to make a line of demarkation.

1492. What do you think with regard to the notion of the effusion of blood carrying the matter with it?—I do not think that is the case; for very often by the children moving the incision is made deeper than intended, effusion of blood follows, but the vaccine matter is not lost; at least a vaccine tumour arises at the incision.

1493. Is not experience the best test of the one or the other mode producing the effects desired?—There is no doubt of it.

Andrew Johnson, Esq., called in; and Examined.

Andrew Johnson, Esq.

1494. DO those accounts that have been presented from the London Vaccine Institution give a correct account of the income and expenditure of the last five years?—I think there is an error in the last sum.

1495. To what extent?—To about 200 *l.*

1496. Is it too large or too small?—It is 800 *l.* instead of 600 *l.*

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1497. Did you draw up that account?—No, I did not.

1498. Will you have the goodness to send a detailed account of your expenditure, and will you please to send the correct account of your expenditure for the last year?—Certainly, I will.

1499. It appears that the expenditure is rather encroaching upon the income, is it not?—In the years 1829 and 1830 we fell off very much, in consequence of our original subscribers having died off, and their successors not knowing the benefit of our connection, that we were not able to go on to pay our postages; the postages were 5 *l.* a week.

1500. Are you of opinion, that if you were allowed to send your charges of lymph post-free, such an encouragement would be given to your institution, that it would be able to support itself upon a very much larger scale than it does at present, without any grant in support of its funds?—Decidedly so.

1501. You think that it would then be supported largely by subscriptions from medical men?—I am positive that if we were to announce that we could receive letters free of postage, and transmit lymph free of postage, ten times the quantity would be required of us that is required, because our postages run from 4 *l.* to 5 *l.* a week now; and on one day I myself received 44 letters; Dr. Walker received 11 on the same day, all for vaccine matter.

1502. Did you, at the time you received your letters post-free, receive them through any Government office?—We did not receive them post-free, a part of them were paid.

1503. The question refers to the very early history of the institution?—I had nothing to do with it then.

1504. Can you state what proportion of the income that you receive arises from the contributions of medical men?—We have medical men subscribers, and all the respectable druggists in London, I think, with the exception of one.

1505. Have you ever heard that the stations of the Vaccine Board declined supplying chemists and druggists?—No.

1506. Can you account for the circumstance of medical men preferring to receive their supplies of lymph from your institution to receiving them from the Vaccine Board, although at your institution they are subject to no inconsiderable expense, and at the Vaccine Board they may receive them gratis?—My opinion is, that in the first instance they are well satisfied with the genuineness of the lymph; the second is, it is a convenience to them that we have no limitation of hours, we deliver vaccine matter from seven in the morning till nine at night.

1507. Are you certain their applications are attended to with more punctuality by you than by other institutions?—They are never refused up to this time; we have never refused an applicant, though some of those have been 2 *l.* or 3 *l.* postage.

1508. How do you recover the postage from the parties?—We do not recover it, the institution pays it.

1509. When an application is made by a medical man, do not you charge that postage to the medical man?—No, never.

1510. Then a considerable part of the expenditure of your institution arises out of the payment of postage?—It has done; it does not now so much, because the medical men in the country have employed their druggists in London to procure it since we have resolved not to pay postage.

1511. Have you resolved, on the ground of the great expense which the postage entailed upon your institution, not to pay it?—We have; we could not go on with it; we must have put an end to it.

1512. How long have you been in the office you hold?—Twenty-three years.

1513. Were you a medical man originally yourself?—Not originally.

1514. You would think it proper in case you were to receive communications, and to transmit them post-free, that they should be sent through some post-office clerk or some other officer, who should have the opportunity to see that the privilege was not abused, would you not?—That is precisely the plan that I would suggest.

1515. To any patient that is vaccinated is not a ticket given when they come for examination?—Yes; and we refuse to give any ticket till they do come.

1516. Does the desire of obtaining such a ticket appear to be a sufficient inducement to the parents in the greater number of cases to bring their children again?—It has been the means of increasing the returns, although I am sorry to say that we have a very considerable number of cases that do not come back.

1517. Did you ever hear of any complaint from any person as to the difficulty of procuring lymph from the Vaccine Institution?—That is a very delicate subject

to

to give an opinion upon; such pretexts are sometimes made to us, but such pretext perhaps may not be correct. *Andrew Johnson, Esq.*

1518. Have you any reason to suppose that that difficulty has been experienced?—No. 29 March 1833.

1519. Are the points and glass squares used in vaccination prepared at each of the vaccine stations?—Yes.

1520. Do you know what is the cost to the institution of preparing the glass, independently of the postage?—I cannot tell that; it forms part of the establishment.

1521. That will appear in the account?—Yes.

Veneris, 29° die Martii, 1833.

HENRY WARBURTON, ESQ. IN THE CHAIR.

Charles Murray, Esq. called in; and further Examined.

1522. IS there any point in your former evidence which you wish to correct?—In my former evidence I was asked the question, did not the London Vaccine Institution sometime take the name of the Jennerian Society; and it was afterwards asked me whether some societies had not grown out of the Jennerian Society. In strictness, I could not exactly say that. The Jennerian Society, I see, existed until August 1829, that was a few months after the National Vaccine Establishment, but in a very languid state; but in May 1809, I perceive by an estimate then made, that the Jennerian Society was rather in debt than otherwise; and on the 3d of August 1809 I was then performing the duty of honorary secretary, and the affairs of the society were being wound up, and it was resolved, that "the practice of vaccination by this society be at present discontinued." That was three months after the new Board was established. *Charles Murray, Esq.*

1523. Were you at the same time performing the duties of secretary both to the new Vaccine Board and the London Vaccine Institution?—Yes; I offered to continue in this situation, as the society was likely to be given up, in anticipation of its being wound up, and I continued and made some disbursements.

1524. Is there any other point which you wish to correct?—I was asked respecting the regulations of the freedom of postage; I perceive that originated about 1803, the latter part of that year. When the society was formed, the privilege was proposed to be granted by the Secretary of the Post-office, of franking such letters as were certified by me to be on the business of the Royal Jennerian Society. Something occurred afterwards, I believe it was an endeavour on the part of Dr. Walker to partake in the privilege in some way, and there had been some difficulties with regard to other institutions, for which they franked at that time; and I see in the year 1831 I received a letter from Sir Francis Freeling, in which he says, "The practice which has obtained in this official department of franking the correspondence of your institution and others, is ordered by the postmaster-general to be discontinued forthwith." That terminated in March 1806. Then the privilege now granted to the National Vaccine Establishment is rather differently arranged from the manner in which it was imparted to us, in the manner which I have stated, because all the letters are sent to the Secretary of State, and it is an indulgence that from the Secretary of State's office they are transmitted post-free.

John Webster, M.D. called in; and Examined.

1525. WERE you Physician to the original Vaccine Board, in Broad-street, Golden-square?—I was one of the Physicians. *John Webster, M.D.*

1526. When was that institution first established, and when was it given up?—It was established in December 1799, and was discontinued on the 21st March 1826.

1527. Was that a cash-book of that society? (*a book being shown to the Witness.*)—It is, of the middle period of the charity.

1528. Does this printed paper, which you now deliver in, contain a statement of the origin, progress and termination of that society?—It does, and is signed by Dr. George Pearson, who, being the original physician of that establishment, knew every circumstance therewith connected.

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1529. How was that institution supported?—It was supported by subscriptions from the public, like other charitable institutions; by subscriptions from medical men in the neighbourhood, and others residing in London: it was also supported by subscriptions from different departments of Government; for instance, the War-office subscribed 25 guineas per annum, the Ordnance-office subscribed 15 guineas per annum, and the Navy Board subscribed 10 guineas per annum, in order to obtain vaccine lymph for these departments.

1530. Did those subscriptions continue until the breaking up of the society?—The subscription from the War-office was discontinued some time ago; I cannot say exactly when, but several years before the institution was dissolved. The subscriptions of the other two departments, the Ordnance and the Navy Board, I understood from the Secretary, were nevertheless continued to the last.

1531. Was that institution established principally by medical men, with a view to inform themselves, shortly after Doctor Jenner first made his discovery known, of the nature of the disease, and its efficiency as a preventive against small-pox; or was it instituted merely as a charitable institution?—It was instituted, in the first instance, principally to investigate the nature of the vaccine disease as a preventive of small-pox, and also to keep up a supply of lymph for the profession and gentlemen subscribing towards its support: but in the early period of the institution, I should mention that the medical officers, particularly Dr. Pearson, were more anxious to investigate the subject than to have numerous patients. Latterly, however, the subject being fully investigated, they vaccinated to a greater extent.

1532. What was the ordinary expense of that institution?—During the last seven years the institution existed, the aggregate expense was 1,327*l.* 16*s.* 7½*d.*, making an annual average of less than 200*l.*

1533. Was it maintained efficiently during that period with that income?—In so far as regards the vaccination of children, it was very efficient: whilst I was physician, every child that came was vaccinated.

1534. Was it able to keep up an independent supply of lymph, or did it occasionally lose the supply, and have recourse to other institutions to restore the supply?—During the summer months there was an abundant supply of lymph; once or twice, I believe, not however from my own knowledge, but from the secretary, application has been made to other sources for a supply of matter; but not whilst I was physician; we always then had plenty of lymph.

1535. Did you ever send away any patients to the National Vaccine Board?—None, that I know of my own knowledge.

1536. What number of patients attended annually?—From 1,300 to 1,400 were vaccinated annually; frequently in the summer months from 35 to 40 have been vaccinated in one day.

1537. How many hours a day, and how many days in the week, did the vaccinators attend?—Twice a week, Tuesdays and Fridays, and the hour was from one to two, but if necessary it was sometimes protracted to half-past two or three.

1538. Did the Board ever obtain lymph from Percy-street?—Not that I know of.

1539. Have you ever yourself for any purpose obtained lymph from Percy-street?—Previously to my being physician to the Broad-street Institution I have got lymph from Percy-street; and since the discontinuance, I believe I have got in one instance lymph from Jermyn-street; but as my practice is very little in that department, it was in some of these instances for friends as much as for myself.

1540. Was it efficacious?—That received and used by myself, I must candidly say, did not take. I have got matter, as I stated, occasionally, but it never took in one instance that I recollect.

1541. How long was that ago?—From Percy-street about eight or ten years ago, if I remember; and I have remarked in the very few instances I so obtained lymph, and in that from Jermyn-street, that it did not take. Of course I am bound to make such an acknowledgment.

1542. Do you think a Board supported by public funds is necessary to keep alive the disease, and to preserve a constant supply of lymph?—When vaccine lymph was first made known, I have always considered that the patronage of Government was then necessary and desirable; now the vaccine disease is so valuable to the public, and it is so much the interest of the profession, and likewise of the public, to keep it up constantly, that I think it does not now require further Government pecuniary aid, any more than other remedies used in medical practice; I do not think such to be more necessary than to keep up a constant supply of, for instance,

instance, sulphate of quinine, in order to cure or prevent ague. It is doubtless desirable that there should be a constant supply of vaccine lymph, but I think this might be obtained by institutions, without the pecuniary aid of Government.

1543. Do you think there is such a demand for it, on the part of the medical practitioners throughout the country, that if the Board were dissolved and the grant withdrawn from the public, medical men would immediately unite and form institutions in the metropolis, for the purpose of keeping alive that supply?—Assuredly, it is at present a great advantage to have places supported by Government; but if they did not exist, I feel quite confident the profession, as well as the public generally, would contrive means for getting a constant supply.

1544. You think the profession and the public would immediately subscribe to have institutions for keeping alive that supply?—That is my individual opinion, which I have always entertained.

1545. Do you think that the having a Board composed of medical and surgical men of high eminence to preside over such a Board, has much effect in raising the practice of vaccination, as a preventive against small-pox, in the public opinion?—Unquestionably, in the early stages of vaccination, when the vaccine virus was first introduced, it might have much influence, and did a great deal of benefit; and the fact of vaccination being still supported and patronized by Government, and by influential men in the profession, does much good; nevertheless, I still think vaccination would always exist, from its own intrinsic value, even if the grant of Government were withdrawn.

1546. Do not you think that the publishing the result of the experience of the Board, and showing what per-centage there was of cases where vaccination had been a preventive of small-pox, would be the most efficacious mode of raising the practice of vaccination in public opinion?—That has certainly great influence.

1547. Are chemists in the habit, to your knowledge, of supplying lymph as they do medicine?—I have so understood; indeed I have heard they supply lymph.

1548. Do you think it desirable that they should?—I think the more abundant the supply is of lymph got from every source, so much the better; and if chemists and druggists supply it, this is an additional advantage to the public.

1549. Do not you think that medical practitioners would be the best judges of the genuineness of lymph so obtained, from their experience of its efficacy?—I should consider the facts of the lymph taking, and its afterwards producing the distinct vaccine disease, to be proof positive of its genuineness, and most medical men can judge of those circumstances.

1550. And would that be a sufficient guarantee for its genuineness?—I should consider it would be sufficient; of course, the more guarantees there are added the better.

1551. Do you think that if the public Board were no longer to exist, failures in vaccination would occur more frequently than they now do?—It is very difficult to answer such a question.

1552. Does not the guarantee for the genuineness of the lymph depend upon the character of the medical men appointed as vaccinators, and appointed also to supply the lymph to applicants?—Unquestionably, as in every other article for the treatment or prevention of disease, it is more likely to be genuine when obtained from sources in which we have confidence.

1553. Is it possible, from the examination of the charges of lymph, to say whether the lymph is genuine or not?—It is very difficult to do so; from ocular examination I should say certainly not. Sometimes the slightest thing will injure lymph, and occasionally it will keep for a great length of time. At the original Vaccine Institution, lymph was procured by a medical gentleman before going to India, and carried by him to that country; it lay in the bottom of his medicine-chest while he was in India, and he brought it so back to England. On his return he came to our institution to get a fresh supply of vaccine matter, when he stated he had employed the lymph carried to India to vaccinate a child after his return, and the matter thus used took, and produced the vaccine disease.

1554. Do you recollect the name of the person?—No, I do not, but the secretary could state that fact.

1555. Do you know, then, that as an authentic account of the transaction?—I can say so upon the secretary's authority.

1556. What secretary do you allude to?—Mr. Durham, the secretary of the institution to which I was physician. Therefore what I have now stated shows that sometimes vaccine lymph will keep for a great length of time, whereas perhaps

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other and more recent matter would not have taken; and you cannot by inspection accurately distinguish the one from the other.

1557. Do you think a public Board is more necessary to ensure genuine lymph than it is for judging of the genuineness of any kind of medicine?—As I before stated, when vaccine matter was first introduced, it was very desirable to have a public Board, under the authority of Government, and at present I should consider such patronage an additional recommendation; nevertheless, vaccine lymph might still be got genuine, as it was formerly from our institution, and is now procured from other establishments.

1558. Are there not very many medical practitioners now in the country, of intelligence and honesty, who are practical judges of the genuine form of the disease?—Most decidedly; I should consider it a libel upon the profession to think otherwise.

1559. Do you think that the medical men and the surgical men who form the Board are as good practical judges of the disease as the gentlemen of the profession who are practical vaccinators?—I should presume they were.

1560. Do you think they are better judges?—I should not like to make any comparison.

1561. Do you know whether it is the habit of medical practitioners in London to vaccinate gratis their poorer patients?—I have understood so, and I have seen in windows "Vaccination gratis." I cannot decidedly speak upon this point, but I suppose gentlemen would act in this as they do in other instances, where they treat many poor patients under other diseases gratuitously.

1562. Is there any indisposition on the part of medical men to afford lymph from a patient, having the vaccine disease upon it, to one of their medical brethren?—I should, from my own experience, say not. The only difficulty arises from the mothers, who are sometimes unwilling to have the arms of their children cut by the medical practitioners wishing to take lymph, and particularly if it be from a female.

1563. Is vaccination more practised than it was formerly?—I believe so; but as I am no longer physician to the Vaccinating Institution I can only speak from hearsay, but I have understood that it is now more practised than formerly.

1564. From your experience at the Vaccine Institution in Broad-street, should you say that institutions on that scale might be kept alive at the annual expense of 200 *l.* a year?—I should think such an institution as that was could not be carried on at 200 *l.* the first year, but after it had been established I think it might. The first year of such institutions is always more expensive than subsequently.

1565. Do not you think that if economy were the object of Government in promoting vaccination, that object might be greatly promoted by giving grants in aid to institutions already established or to be established, and raising the larger portion of their funds by public subscriptions?—Undoubtedly it would be a great advantage for those institutions to receive aid from Government, particularly if there were many of them; and certainly as regards the one to which I was attached, since there all the medical officers did their duty gratuitously, thus having no expense for medical attendance: for institutions to receive aid, it would be an advantage.

1566. Can you conceive any reason why, if a grant is made in support of vaccination, those private institutions which are established in order to promote vaccination should not, if in want of funds, participate in that grant?—It certainly would be an advantage for them to receive that grant; but I believe it has often been remarked that where Government subscribe to charitable institutions, the subscriptions from the public to such institutions sometimes fall off. I cannot state the fact precisely, but such an effect has often been said to occur.

1567. Do you think, if the principle on which the Government should make a grant to such institutions was that they should give a certain proportion, one-third or one-half, and that the remaining part should be made good by private subscriptions, that the same objections would be to the principle?—I should think not; but, on the contrary, there would be an additional inducement on the part of the public to come forward and subscribe, that they might thus gain this additional advantage.

1568. When the institution in Broad-street was supported upon the scale which you have described, was it found difficult in the winter to keep up an independent supply of lymph?—In the winter time a much fewer number was vaccinated, and the lymph was not in such great abundance, but there was then less demand for lymph:

as

as far as I remember they were never without lymph; but I was told instances had formerly occurred, and in the winter time, when the lymph was exhausted.

1569. Do you think, when the difficulty, as previously known, of keeping up the supply in the winter, by proper precautions on the part of the heads of the establishment, it would be found practicable at any time to keep up the supply?—I should consider we might have lymph in glasses, and thus have always a supply, and this can be had continually. As to having always fresh patients with lymph on the arm, that is more difficult in the winter.

1570. You think, on consideration, that the disease can be kept alive, not only by means of a patient labouring under the disease, but by always keeping a stock of charges of lymph in the possession of the institution, and that the chance of the loss of the disease is thus reduced almost to impossibility?—I should say there was no chance whatever of the disease being lost entirely; because if it were so to happen, we could go to the original source from which it was obtained.

1571. But putting aside the original source from which the disease is derived, the cow, do not you think, that by keeping a stock of charges of lymph during the winter season, the loss of the disease is rendered morally impossible?—I cannot suppose such a case as an entire loss of the disease in England.

1572. Was the disease, as you had it at Broad-street, derived from Dr. Jenner's patients; or was it derived from the experiments of Dr. Woodville?—That I am unable to answer of my own knowledge; but I have heard from Mr. Durham that the matter originally used in Broad-street was procured from some cows at Islington.

1573. Do you know whether the disease, as it exists over the world now, has been derived entirely from the original experiments either of Dr. Jenner or Dr. Woodville; or whether on the Continent or elsewhere they have derived it immediately from the cow?—That I do not know; but at the Broad-street Institution it was stated by the original founders, and is also mentioned in a printed portrait I possess of a Mr. Benjamin Jesty, of Downshay in the Isle of Purbeck, that in 1774 this individual had vaccinated his own wife and two sons; that is previously to Dr. Jenner.

1574. Was not it Mr. Jesty's practice to inoculate immediately from the cow; and did he ever inoculate as Dr. Jenner did, from a human patient who had received the disease from the cow?—That I am unable to say; but I believe he never did.

1575. Do you think that the National Vaccine Board is of importance for investigating the anomalous forms of the disease?—Undoubtedly it is of great use in investigating those cases; in the same way as the profession would, and in reality do investigate.

1576. Do not you think, that considering the various means of communication to the public, through medical journals and such like, medical practitioners throughout the country are likely to make known these anomalous cases?—Certainly.

1577. Are you aware of the National Board ever having published an account of the various anomalous forms of the disease which came under the cognizance of the Board?—I believe they have published occasionally; but I have not seen all their reports.

1578. Are you aware whether they have published one account of the anomalous cases?—I am not able to say exactly, as I cannot at present recal every circumstance to my remembrance.

1579. Do you think that many unknown cases of the disease are likely to occur, after the long experience of the disease that has now been had?—I should consider we have now a very great mass of information upon the subject; there might, however, occur anomalous cases, as in other diseases.

1580. Do you think that such anomalous cases are likely to be better described and attended to by having a Board composed of the President of the College of Physicians and the President of the College of Surgeons, than they will be attended to and described by medical practitioners in general, if left to themselves and not so superintended?—Undoubtedly such high medical authorities as have been mentioned would, in the question, give greater effect to anything they said or described; but at the same time, I think the profession generally would properly investigate the subject.

1581. Practically speaking, do you think that the cases that have occurred have been

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been better understood and better described, in consequence of the institution of the Vaccine Board?—I am unable to speak upon that subject comparatively.

1582. As a matter of opinion, can you not state?—Undoubtedly a public Board will have greater weight in their opinions than other individuals less influential.

1583. Do you give that as a matter of opinion, or as the result of the experience of the Board?—I give it as a matter of opinion.

1584. Could the institution in Broad-street have been supported, on the scale on which it existed during the last seven years, with the funds of 200 *l.* a year?—I should say, certainly.

1585. Was the privilege granted you of sending the lymph post-free?—Not in my time, nor in that of Mr. Durham's, that is since 1806; I have never heard the institution had lately the privilege of franking, but it might have been originally.

1586. Do you not think, that if such privilege were granted to any vaccine institution, that privilege alone, from the certainty that all practitioners in the country would resort to that institution, in preference to another not having the same privilege, would be sure of being supported by medical practitioners throughout the country in general?—I should say, it would be of very essential service.

1587. Do you think that, by means of subscriptions, and such a privilege, such an institution would be sure of having sufficient means to preserve itself alive, and to keep up a continuous supply of lymph?—I should think so, judging from other institutions that have been kept alive without that privilege.

1588. Do you think that such an institution, in return for such a privilege, would be willing to enter into an agreement that it would afford a supply of lymph to all applicants?—Had I anything to say to such an institution, I for one should decidedly agree to the proposition.

1589. Knowing in what way other institutions, which combine medical relief and charity together, are supported in this town, have you any doubt that, with such a privilege, such an institution would be able to support itself?—I should think it would have a most material effect in supporting itself; and I believe, as I before stated, that it would be of very essential service.

1590. Are you aware that, even at present, a considerable number of chemists and druggists and medical practitioners subscribe to the London Vaccine Institution, for the purpose principally of obtaining thence a supply of lymph, even although they are put to considerable expense by the transmission of charges of lymph?—I have understood from professional brethren that such is the case.

1591. Was there a practice of selling lymph at the Broad-street Institution?—Not at all; I never heard of its being sold: nor was lymph given to every person that came; it was only supplied to subscribers, and to those medical gentlemen who are in the habit of coming to the institution.

1592. There were no proceeds, in fact, as a set-off against the expense of the institution; the whole expense of the institution was 200*l.*, and there were no proceeds besides the subscriptions?—Not that I am aware; of course I know but little of the finance department, further than as one of the medical officers; the secretary or treasurer would be better able to answer these questions.

1593. Was there no station except that at Broad-street connected with that institution?—None.

1594. Can you assign any cause for the failure of the matter that you procured from Percy-street?—The instances were two or three; the lymph was like every other matter; the vaccine virus procured from other institutions would fail sometimes, but it happened in these very few instances that it did not take. I should suppose I obtained lymph not more than two or three times, because when at the institution in Broad-street of course I had always a supply of our own; since then I got matter, when required, from the Small-pox Hospital.

1595. You do not think that any imputation deserves to be cast upon the establishment for that failure?—Not the least; the slightest thing will destroy the matter; even on children, apparently good subjects for the operation, it will not always take.

1596. You said that the practice of vaccination might subsist without Government support?—I should think so; and I am of opinion the vaccine pox is now considered so valuable that it would not be needed; of course Government patronage would be useful in extending it further.

1597. Do not you consider it desirable that the lymph supply should be fresh?—Certainly;

—Certainly; the more recent the lymph can be procured, so is it more likely to succeed.

1598. Notwithstanding that fact of lymph having gone to India and come back, and succeeded, in one instance?—Decidedly; I only mentioned that fact to show how long lymph will sometimes keep, under even adverse circumstances.

1599. What per-centage of charges of lymph a month old do you think, taken in a proper manner, would be likely to fail?—I have never investigated the subject so minutely, and therefore I could not give a precise answer.

1600. You would object to the practice of keeping it in store for any length of time?—Decidedly not, even if you can have fresh lymph; but I would only keep the lymph in store as an additional security.

1601. Do you mean that you would object to keeping a store in winter, as an additional security for not losing the disease?—Certainly I would keep it, in addition to the other means of propagating the disease.

1602. If you had a hundred charges so kept in store, and you had lost the disease in winter, do you think that there would be a moral certainty that out of those hundred charges you would be able to revive the disease?—Yes, I should think so, certainly.

1603. You say that there are objections made by mothers, especially with regard to female children?—Yes, objections have been made to allow matter to be taken from their arms; not always, but occasionally the mothers have stated objections.

1604. What has been the mode of operation where that objection has been principally made?—The objection has been made in these instances by the mothers, who were unwilling to allow their children's arms to be cut, and the matter to be taken by the person wishing to vaccinate other children.

1605. Are you aware of the practice of vaccination at the Small-pox Hospital?—I have seen it very frequently.

1606. Is the practice performed by several incisions?—Yes, the practice was nearly the same as in Broad-street, where we made three incisions on each arm.

1607. Do not you think that the objections of mothers would be stronger where that mode of practice was followed than where there was a small puncture, to vaccination itself?—Some mothers certainly do not like a great many punctures to be made on their children, but not always.

1608. With regard to the publication of anomalous cases, do not you think that there might be a danger of speculations and theories arising from such publications, especially where no security existed for the judgment of the person from whom they came?—I should think there was not more danger than on any other medical subject.

1609. Do you think that there is no danger that the practice of vaccination might be prejudiced by such publications, and the speculations and theories that might possibly arise from them?—I have always considered that the more information we obtain upon the point, even though some of it may be erroneous, will be beneficial towards investigating the subject.

1610. What speculations and theories will be likely to arise out of the leaving to practitioners the conduct and management of a disease so well understood as the vaccine disease?—I am not aware of any; I do not think much serious evil would thence accrue; individuals might form erroneous opinions, but I think the profession in general would act in this as they do in speculations regarding every other disease, in the best manner.

1611. Is there anything now to prevent persons forming speculations and theories upon the disease?—I should think not; there will always be theorists.

1612. Do you think that the Vaccine Board being presided over by the President of the College of Physicians and the President of the College of Surgeons, prevents many speculations and theories on the subject of the vaccine disease being afloat?—The authority of the Presidents of the Colleges of Physicians and of Surgeons would perhaps give more influence to their opinions, and might prevent rash and theoretical people from indulging in speculations than otherwise; but independent professional men would not be so influenced.

1613. Do you think it does have that effect?—I cannot speak decidedly as to the effect.

1614. Can you state anything as to the authenticity of an experiment said to have taken place, of this nature: that the inside of a blanket was impregnated with the matter of small-pox, that a cow was wrapped up in the blanket so impregnated,

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that the cow took a cutaneous disease, which was said to be the vaccine disease?—No, I am not acquainted with the particulars of that experiment.

1615. Do not you consider it desirable that medical men should have the power of procuring vaccine matter without expense?—Undoubtedly; medical men, I suppose, would be more anxious to get it without expense than by paying for the supply.

1616. If a contribution were necessary, would it not in some degree be an impediment to vaccination?—There is no doubt whatever that getting lymph free of expense would be most advantageous for the profession, in the same way as if any other medicine could be obtained free of expense; that, I suppose, would be thought advantageous.

1617. Are you not of opinion that there are many medical men who would be unwilling to pay a contribution to such an institution?—Of course some might, but not every practitioner, if I can judge from the number of medical men who subscribed to the Broad-street institution chiefly to get a constant supply of matter.

1618. Among medical men in general would there not be many medical men who would object to pay a contribution?—Very likely some would object in such a numerous profession.

1619. Do you know the number of medical practitioners in England and Wales?—No.

1620. Do you remember a report given in to the House of Commons, stating that the number of medical practitioners in England and Wales was 10,000?—I have heard as much.

1621. Do you remember such a statement being made in the Anatomy Report?—Now that it is recalled to my recollection I have heard that statement, but I could not now distinctly speak as to the number.

1622. Have you any doubt that the number is so large that from amongst them, in case of the public grant being withdrawn, there would be found a sufficient number of contributors to keep alive the disease by a new institution being supported?—I think vaccine lymph is so valuable to the profession, and likewise to the public, that means would certainly be found to keep up a supply of this preventive against small-pox, in the same way as means have been found to keep up the supply of preventives or remedies useful in all other diseases.

1623. If medical men in general are willing to pay the expense of importing any valuable drug, would not the same motive exist in keeping alive the vaccine disease that may be considered to exist in the importation of a drug?—Certainly; in fact it is the public who really pay all expenses.

1624. Do you think that the object would be kept up to the same extent as it is kept up now by means of the National Vaccine Establishment?—I cannot answer that question exactly, but I suppose a sufficient supply would be obtained.

1625. Are you aware that bills were some years ago brought into Parliament for the purpose of preventing inoculation by small-pox?—I remember some discussion did take place, but whether specific measures were adopted or not I am not aware.

1626. Are you aware that many persons not being medical practitioners go about the country for the purpose of inoculating for small-pox?—Yes, I have understood so; and in London I have heard of places where persons can be inoculated by paying a small sum.

1627. Do you think that it would be expedient that the Legislature should pass a bill limiting the practice of inoculation to medical practitioners only, prohibiting those who who were not medical practitioners from inoculating for small-pox?—Certainly; because we would thus be more likely to prevent the source of infection from being extended, which is always kept up by inoculation.

John Treadwell Simpson, Esq. called in; and further Examined:

J. T. Simpson, Esq.

1628. CAN you speak as to the fact, whether a supply of lymph has been refused or not by the National Vaccine Establishment?—It was never refused, to my knowledge.

1629. Can you undertake to say that it never was refused to any person known to be a chemist, at any of the vaccine stations?—I cannot positively state that.

1630. Have you ever been privy to a supply being refused to a person on the ground of his being a chemist?—No.

1631. If

1631. If you had been privy, what observation should you have made upon it?—I should have thought it wrong to have refused it, if a chemist and druggist applied for it. I recollect one particularly applying to the National Vaccine Establishment for lymph, and I then said to him that I thought it would be better for his correspondent to apply immediately to us, as it was done with greater facility than by its going through a third hand.

1632. What chemist is it that you refer to?—I do not recollect the name.

1633. When was it?—Perhaps a year or two ago.

1634. You have an indistinct recollection of it?—I have; I recollect the person whom it was sent to: it was a Mr. Veese, of Stilton, whose name I happen to know; but he had the lymph at the time it was sent to him.

Mr. *Abraham Beaumont* and Mr. *Edward Baker*, called in; and Examined.

1635. (To Mr. *Beaumont.*)—Are you a partner in the house of Corbyn and Company, who carry on the business of wholesale chemists and druggists in High Holborn?—Yes.

1636. (To Mr. *Baker.*)—Are you partner in the house of Gale, Baker & Ward, carrying on the business of wholesale chemists and druggists in Bouverie-street?—I am.

1637. Are you in the habit of sending vaccine matter to medical practitioners in the country applying to you?—(Mr. *Beaumont.*) Continually.—(Mr. *Baker.*) We do also.

1638. State the source from which you are in the habit of obtaining your supply of lymph?—(Mr. *Beaumont.*) We usually obtain it at the London Institution.—(Mr. *Baker.*) We get ours from the Holborn-bridge Institution, and from Finsbury-square; when we cannot procure it at Holborn-bridge, we go to Finsbury-square.

1639. Are both of those stations of the London Vaccine Institution?—(Mr. *Beaumont.*) Yes, they are.

1640. (To Mr. *Beaumont.*)—You said that you usually obtained your supply from the London Institution, do you ever obtain it elsewhere, and under what circumstances do you obtain it elsewhere?—We have obtained it from the institution in Percy-street, but it has only been at the request of our correspondents in the country.

1641. Have you ever had reason to complain of the lymph furnished to you from the station of the London Vaccine Institution as being inefficacious?—Exceedingly rarely; to say we never had, would not be quite correct.

1642. The instances have not been more frequent than may be accounted for from the peculiarity of the patient probably who was vaccinated?—Not being a medical man myself, I cannot say, but I should conceive not.

1643. (To Mr. *Baker.*) Do you accede to that?—I do.

1644. Are you subscribers to the London Vaccine Institution?—(Mr. *Beaumont.*) We are.—(Mr. *Baker.*) We are also.

1645. Do you ever send charges of lymph into the country which cost the practitioners postage?—(Mr. *Beaumont.*) I believe they always cost postage, at least, if we send by post it does not go postage free, and if we send it by parcel, the postage of course is not charged.

1646. Can you obtain readily supplies of lymph, on application for them to the stations of the National Vaccine Board?—Yes, we have never been refused.—(Mr. *Baker.*) Nor have we.

1647. How is it that you, who can obtain supplies of lymph gratis from the National Vaccine Board, prefer obtaining supplies from an institution to which you subscribe?—(Mr. *Beaumont.*) It being an institution to which we have belonged from the period of its being instituted, we have continued up to the present period to go there, and always having been well supplied there, we had no inducement to go elsewhere.—(Mr. *Baker.*) That is precisely the case with us.

1648. If you went to the stations of the Vaccine Board, would you not have this facility, that they would transmit the charges of lymph which you require, post-free to the applicant through the medium of the post-office.—(Mr. *Beaumont.*) I suppose they would do so, but it is rather more agreeable to us to send ourselves, with letters executing our own commissions too.

1649. What are the motives which induce you to prefer that course to one which at first sight must appear so very convenient to you, namely, that of giving the order to one of the stations of the National Vaccine Board, and having the charge sent through the post-office gratis?—It is a question that has never come before us to

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consider which would be the best; we follow the plan which we have been in the habit of pursuing, without reference to the other; I would rather say it is a subject which has not occupied our consideration; that is the only reason I can give.

1650. Is your usual mode of sending a supply by letter, or by parcel with drugs?—More frequently by letter.

1651. When you send by letter it costs the applicant the postage?—We apprehend it does; we have no reason to think otherwise.

1652. Do you know why your correspondent in the country prefers making application to you, and being at the expense of the postage, to applying to one of the stations of the Vaccine Board, where he may be supplied post-free?—I am not aware of the reason why they prefer that, but always having received a supply when they require it through our means, and it generally having succeeded, they have been satisfied with that mode of supply, and have not wished to alter. That is the only reason that I can assign for it.

1653. For how many years have you derived your supply from the London Vaccine Institution?—I cannot exactly charge my memory with it, but I think from the very first commencement of it; indeed I have no doubt of it.—(Mr. *Baker.*) I imagine that that is the time with us.

1654. Do you entertain any apprehension that if the Government were to withdraw its annual grant of 2,200*l.* a year from the National Vaccine Board, and the public were left to its own resources for keeping up the supply of lymph, the practice of vaccination would be greatly diminished?—(Mr. *Beaumont.*) That is a question that I feel some difficulty in giving a reply to. I should think there would not be any difficulty; and I ground it upon the facility with which we have always procured vaccine lymph from the London Institution.—(Mr. *Baker.*) I concur in that opinion.

1655. Do not you think that the very circumstance of withdrawing that grant from the National Board would stimulate medical men to support fresh institutions for the keeping alive the disease, and affording a supply of lymph?—If such fresh institutions were required, I think it would.

1656. Do you think such fresh institutions would not be required, but that the existing institutions supported by subscriptions would be adequate for keeping alive the supply?—I should think they would; that is merely an opinion. I am not competent to give a precise opinion, but that is my impression.

1657. You think that the subscriptions to existing private institutions would probably be much increased in consequence of the dissolution of the National Board?—If there was any probability of our existing institutions failing, I have no doubt that they would; that the medical men throughout the country would be so affected by the circumstance, that they would join to prevent their failing.

1658. If the private institutions were allowed the privilege which is granted to the National Vaccine Board, of transmitting their lymph post-free, would not such a privilege alone be such as to insure the maintenance of such an institution?—From the very great frequency with which we have applications for vaccine lymph, I should conceive that medical men generally are not particularly anxious for such a privilege. I have never heard of objections from medical men to pay the postage of their vaccine.

1659. Do you not think that they would rather prefer applying to an institution by which they could receive their charges of lymph post-free, and that they would be willing, in preference, to subscribe to an institution which did send the charges post-free?—It is difficult to account for the motives which actuate different individuals; but, judging from the number of applications that we have, and which are always executed by the applicants paying the postage for the lymph, and it being generally known that there is an institution where they could procure it postage free, I could hardly give any different opinion.

1660. Do you believe that a considerable number of wholesale chemists in London subscribe to the London Vaccine Institution for the purpose of charity, and also for the purpose of obtaining a supply of lymph for their country applicants?—The motive which induces them to contribute, it is not for me to say; our motive certainly is for our convenience.

1661. But you believe that a very considerable number of wholesale chemists do subscribe to that institution?—No doubt of it.

1662. Do you know whether any number of wholesale chemists in London are in the constant habit of obtaining their supply of lymph from the stations of the National Board?—I am not aware how that may be.

1663. Then

1663. Then you are not aware of any refusals having been given on application to the National Vaccine Board to chemists to afford them a supply as chemists?—Certainly not; on the contrary, when we have applied, it has been most readily granted, but the applications have been rare.

1664. You think that a private institution, such as the London Vaccine Institution, affords quite a sufficient guarantee for the authenticity of the lymph that is supplied by them, and that it does not require a Board composed of men of very great medical or surgical eminence to afford a guarantee for such authenticity?—Not being a medical practitioner myself, it is a question which I cannot answer; I can only mention the very few statements of inefficacy which we have received of the vaccine lymph.

1665. As far as your own judgment goes, would you as soon receive the charges of lymph from a private institution constituted as the London Vaccine Institution is, as you would receive the charges from one of the stations of the National Vaccine Board, superintended as it is by medical and surgical men of the first-rate eminence?—On sending to any of our medical correspondents vaccine, we should feel equal confidence in the one as in the other.

1666. If you were to hear to-morrow that the National Board was dissolved, should you, in your own mind, entertain any serious apprehensions of there being great risk of losing the disease from its not being kept alive in London, and consequently there being a loss of the means of acquiring lymph punctually through the country?—In the vicinity we have observed it; and grounded upon the comparative means I have with respect to the National Institution, it is rather difficult to give an answer, except it is grounded upon the bearing with which I have observed it myself, and I should think not; but I feel very ignorant of the supply of vaccine from the National Institution.

1667. Have you interfered at all in the management and direction of the London Vaccine Institution?—No; my knowledge has been confined to paying my subscription.

1668. Do you know of any resolution they have come to lately, of restricting their supply of lymph to medical practitioners or chemists in London who were subscribers, on account of the limitation of their means?—I am not aware of it.

1669. You have not been privy to such?—No.

1670. Then you can say nothing as to the expense of entertaining such an institution; you have no practical experience whatever?—None whatever.

1671. You say you have been requested to obtain the lymph from the National Establishment?—Yes.

1672. Upon what ground has that request been made?—It was requested that I should procure it.

1673. No reason assigned?—No.

1674. Are you convinced that your correspondents in general are aware of the existence of the National Establishment?—I should suppose so.

1675. Is it not possible they may not be aware of the particular privilege of the National Establishment with regard to a free postage?—It is possible.

1676. Is it not probable they would prefer having it of that establishment if they were aware of it, on account of saving the money?—I should only suppose they must be aware of it.—(Mr. *Beaumont.*) I do not think they give it a thought usually; they can always obtain it.

1677. Were you aware yourself there was no contribution necessary from the Vaccine Establishment?—I have not thought about it; I should not suppose there was any required there.—(Mr. *Beaumont.*) I was not aware of it.

1678. (To Mr. *Beaumont.*)—You were not aware that any contribution was necessary?—No.

1679. (To Mr. *Baker.*)—What was the possible convenience that induced you to apply to the National Vaccine Establishment in preference to the other; is it in the neighbourhood?—Yes, it was in the neighbourhood.—(Mr. *Beaumont.*) It is near upon the spot.—(Mr. *Baker.*) Ascending by the institution in Holborn-hill half-a-dozen times a day.

1680. Are your correspondents retail chemists, or in the medical line?—They are most exclusively medical practitioners.

1681. (To Mr. *Beaumont.*)—Your's the same?—Yes.

1682. (To Mr. *Baker.*)—Is there any difference in the punctuality you have obtained in the supply from the London Institution and from the National Board?—None;

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—None; I do not remember from either Board we have ever met with any difficulty in procuring it.

1683. You always send the charges, I believe, as fresh as you can?—Yes.

1684. Have you made applications for charges to send abroad?—We have not.

1685. Occasionally do you execute such orders?—I do not think we ever sent any abroad.—(Mr. *Beaumont.*) We do now and then.

1686. As you have sent charges of lymph both from the London Institution and from the National Board, have you learnt from your correspondents, in both instances, that they have been both efficacious?—We have had instances, where the supply has been obtained from each, of failure.

1687. But has there been any difference in this respect, of failures in charges supplied from the one or the other?—We have had more instances of failure in the London Institution; but the supply is 24 times as great.

1688. But in proportion you think that equally efficacious?—I should say so.

Martis, 23° die Aprilis, 1833.

HENRY WARBURTON, ESQ. IN THE CHAIR.

Mr. *Richard Robertson*, called in; and Examined.

Mr. *Richard Robertson.*

23 April 1833.

1689. YOU are Vaccinator at the Jermyn-street Establishment?—I am.

1690. You are in the habit of making periodical returns to the central station of the number of persons vaccinated at that station?—I am.

1691. Does that return include as well your private patients as the number of persons who apply to be vaccinated gratis at the station, as a station of the National Vaccine Board?—It is merely the public.

1692. Does it contain those only whom you personally vaccinated, or does it contain any number of those who are vaccinated by your correspondents?—Merely those whom I personally vaccinated at the Jermyn-street station.

1693. Do you vaccinate them all yourself?—Yes.

1694. Since when have you been a stationary vaccinator?—Since July 1831.

1695. Were you not a partner with Mr. Marshall?—Yes, I vaccinated for him.

1696. When did Mr. Marshall retire from business?—He was incapable of attending at the time I vaccinated for him; he retired altogether from business in Michaelmas 1831.

1697. Then the returns you have made contain no number of persons vaccinated, saving those that you have personally vaccinated yourself?—Yes, those vaccinated during a week or two, when I was indisposed.

1698. Mr. Marshall was appointed vaccinator, and you were partner with Mr. Marshall, and you succeeded Mr. Marshall in his business?—Yes.

1699. You purchased it?—Yes.

1700. And upon your purchasing the business of Mr. Marshall, you were appointed vaccinator instead of Mr. Marshall?—I was.

1701. Have any occasions occurred when you have lost the independent supply of lymph at that station, and been obliged to recur to other sources?—Yes.

1702. Has that occurred more than once?—It has occurred two or three times.

1703. When did it occur?—When the weather was wet; the people living at a distance will not bring their children, so that missing one day, the supply is deficient for the next week.

1704. When you have lost the supply, to what source have you recurred for renewing the supply of lymph?—To the National Vaccine station in Russel-square; that has been the only source, as far as I can recollect.

1705. Do you mean to say that that has been the only source?—With the exception of one pair of glasses, that has been the only source to which I have applied; and I also applied for one patient to the Small-pox Hospital.

1706. Did not a case occur where you had a child under vaccination at the Small-pox Hospital that was brought to your station by Dr. Locock?—That was the case I allude to.

1707. Has it occurred more than once that you have recurred to the Small-pox Hospital for a supply?—Previous to that I had obtained the glasses from the

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Small-pox Hospital, which failed, and I had this patient the next day to vaccinate from.

1708. Under what circumstances is it that the independent supply from your patients is liable to fail?—The patients not coming the day we require them to come, and giving us false directions, so that we are not able to trace them.

1709. Are you in the habit of keeping by you a certain supply upon points, so that, in case you have not a patient under the proper stage of the disease, you may renew it in that manner?—Generally I do; and except when I depend upon the supply from patients in the previous week, I generally have points.

1710. Do you afford a supply to all applicants of armed points?—Yes, when I can afford them.

1711. Do you afford a supply to applicants for points without receiving directions upon the subject from the inspector, or do you wait for authority from him before you make the supply?—No, I give it whenever it is applied for.

1712. Do you make any distinction between chemists and medical practitioners?—I generally give it to medical practitioners, except that I might have given it to one or two persons besides; when I am busy vaccinating, I do not know who comes for matter; but they are generally medical men.

1713. If wholesale chemists were to apply to you, stating that they wished to supply their correspondents in the country, should you, or should you not, object to give them a supply of points?—I should not object.

1714. What has been your practice?—I have given to them, provided I could spare them. I have generally contrived to keep a few for myself and send the remainder to the Board, but if I have a supply by me, and can afford to part with a few, I do.

1715. Then it is only in case the number of applicants from other quarters is so great that you are not able to supply wholesale chemists?—Yes, I send them to the Board.

1716. How many wholesale chemists have you supplied during the last year?—I do not know; I have supplied Mr. Reece in Piccadilly; I know of no other.

1717. In the previous year can you remember any?—I know of none.

1718. In general are wholesale chemists in the habit of applying to you for a regular and constant supply?—I should say not.

1719. Have there been more instances than one in which you have sent them away without a supply, upon their making application, by reason that you had not a sufficient stock of points with you, and that all you had were likely to be called for from other quarters?—When there are a great many applications to the Board Mr. Simpson informs me of it; I then send him all I can, merely reserving a few for myself.

1720. Have you any directions from the Board that all that are not wanted by medical practitioners should be forwarded to the Board?—I have had no particular directions, except from Mr. Simpson, who told me that when he required matter he would let me know, and I was then to send him as many as I could; and at other times, when he has had an overplus of matter, he has desired me not to send so many, and in that case I have not taken so much from the patients.

1721. Do you receive any directions from the Board, or from the inspector as to the particular manner in which you are to vaccinate?—Yes; no further direction than as to the method of vaccinating, so as to keep up the supply on certain days.

1722. As to the particular manner in which the operation of vaccination is to be conducted, have you received any directions from the Board?—I cannot say that I have received any specific directions from the Board upon that point.

1723. Do you make any special reports to them in case of any anomalous form of the disease appearing; that is, for example, of a patient labouring at the same time under other cutaneous disorders?—I mark them down on the book.

1724. Do you make special reports to the Central Board, and does the Board give you any instructions respecting such cases?—No.

1725. Do you make any special reports as to the number of cases that come under your cognizance where small-pox occurs after vaccination?—I have not had a case, to my knowledge, in which that has occurred at my station.

1726. Do you make it a subject of inquiry where cases of small-pox occur, whether they have occurred after vaccination or not?—Yes.

1727. Are the cases frequent where you are called upon to vaccinate, in families in which a case of small-pox has occurred, for the purpose of preventing the

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spreading of the small-pox in the same family?—Yes, I have been called in to several families to do so.

1728. Are the cases frequent where children are brought to you from poor patients of parents having taken alarm at the breaking out of the small-pox in one of the family?—I have had many cases of that kind.

1729. Do not you think it is important that the vaccinator should have a practical and intimate knowledge of the small-pox?—I do.

1730. Is it not essential that he should be able to distinguish it, in order that he may not peradventure arm the point with small-pox instead of the vaccine matter?—Certainly.

1731. Are there not many cases in which the two pustules appear upon the same arm together?—I have not seen such cases.

1732. Do you know that such cases have been described by those persons who have written upon the disorder of the two having occurred upon the same arm?—No; I have known cases in which the small-pox has taken precedence of the vaccination, and has stopped it altogether.

1733. Are you not aware that in Dr. Willan's book cases are stated of the two pustules appearing upon the same arm almost contiguous to one another?—No.

1734. But you are of opinion that it is essential that a vaccinator, in order to avoid mistakes of the kind referred to, should have a practical acquaintance with small-pox?—Certainly.

1735. When you lost the independent supply of lymph at your own station, did you make any representation to the Board, or to the inspector, Mr. Simpson, in consequence?—I once or twice applied there for matter in consequence, and told him I had failed in a supply.

1736. When the case occurred of your having the child from the Small-pox Hospital, did you make any representation to the Board, or to Mr. Simpson, upon the subject?—No.

1737. When you got that pair of glasses from the Small-pox Hospital, was it because you were unable to procure it from the institution?—No; I was sending that way, and desired my apprentice to get it; I had not applied to the institution at that time.

1738. Have you ever refused giving a supply to chemists without referring them to the Board?—No, I cannot say that I have; if they come to me during the time of vaccination, I give it to everybody who comes for it; but upon other days in the week, not vaccinating days, I have generally refused them, and have sent them to the Board; I always send everybody to the Board if I have no points to spare.

1739. What is your mode of vaccination?—By making small punctures.

1740. Is it the mode generally practised by the vaccinators of the National establishment?—I believe so.

1741. Is the mode practised by the vaccinators of the National establishment uniform, or do they each follow the course which they have practically found the most efficacious?—I do not know that there is any special practice.

1742. Are they directed to make a superficial puncture, or to make it deep?—Superficial.

1743. You say that you record extraordinary cases in a book; is that book shown to the Board?—The inspector, Mr. Simpson, comes and looks at the book occasionally.

1744. Can you produce the book to the Committee?—Yes.

1745. When you have been in attendance upon a patient for the small-pox, should you think it necessary to take any precautions before you proceeded to vaccination?—I should wash my hands, and perhaps change my coat.

1746. You would have a scruple in going immediately without some precaution?—Yes, I should.

1747. What is the extent of the precaution you take after going into a family in which there is a small-pox patient before proceeding to vaccination?—If I was called upon to vaccinate immediately after visiting a small-pox patient, I should wash my hands and change my coat.

1748. Suppose several hours elapsed?—I should take the same precautions.

1749. Do you mean that you invariably in such a case change your coat?—I have never been called upon to vaccinate a patient immediately after.

1750. Suppose it is in the course of the same day?—I should of course wash my hands, but not take any other precautions.

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1751. You said you lost your independent supply of lymph on account of wet weather?—On account of patients not coming in consequence of wet weather.

1752. Have you experienced much difficulty in getting their subsequent attendance after the operation has been performed?—Very great; a great many come to be vaccinated who refuse to come a second time after it has taken; and some people give false directions, in order that they may not be found out.

Dr. *Charles Locock*, called in; and Examined.

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1753. YOU reside in Hanover-square?—I do.

1754. Have any cases occurred in which you have applied for lymph to the Small-pox Hospital?—Yes, on more than one occasion.

1755. Have there been any particular reasons why you have applied to the Small-pox Hospital in preference to the stations of the National Board?—The only reason is, that I have been unable to get it at either the National Board or at any stations at which I have been in the habit of going, in consequence of the non-attendance of patients, or else an accidental lapse of a day, on account of a trifling circumstance; for instance, I remember on one occasion it was on account of a drawing-room being held, which blocked up Jermyn-street, and prevented the patients from coming; and on another occasion recently it was owing to Easter-Monday, which being a holiday the people did not come.

1756. What are the stations you applied to beside Jermyn-street?—At the central station in Russel-place; I have often found a difficulty at that establishment, because I am particular in taking the lymph upon the eighth day, and they have given me lymph upon the ninth day or the tenth day, which I declined taking.

1757. Then it has not been from an indisposition to supply you, but because of their not being able, from various reasons, to comply with all the particulars of your request?—Certainly; there has been no indisposition upon any occasion, but rather a disposition to give me every facility.

1758. Have you met with equal facility at the Small-pox Hospital?—Entirely from personal friendship; I have been refused on public grounds; I have been told that it was a special exception in my favour, being a personal friend of the physician of the hospital.

1759. Do you mean that at the Small-pox Hospital there is an indisposition to supply applicants?—I can merely repeat what I have been told by the resident medical officer there, who has said we are not in the habit of encouraging medical men to apply here for lymph; we will vaccinate as many as apply, but we will not supply medical men.

1760. Who has given you that answer?—Mr. Wheeler, the resident surgeon.

1761. What were the public grounds stated?—I mean by public grounds that they wish to procure subscriptions to their institution, and therefore they would not supply lymph to those that do not subscribe.

1762. Then you believe the principal occasion on which they decline to supply medical men is when those medical men are not subscribers?—Yes; if they were subscribers I believe they would not object to it, but they would be entitled to it by being subscribers.

1763. But a special exception has been made in your favour, though you are not a subscriber?—Yes, in consequence of the friendship of Dr. Gregory.

1764. Did not an occasion occur where you were supplied with a child under vaccination from the Small-pox Hospital?—Yes.

1765. Was that an occasion when you could not obtain a supply from the vaccine institutions?—Yes.

1766. You took that child in your carriage and carried it to several patients?—I did.

1767. Was that a child upon the eighth day?—It was.

1768. Did you also take that child to the National Institution in Jermyn-street to enable Mr. Robertson to keep up his supply?—I did.

1769. Had Mr. Robertson previously made any communication to you upon the subject?—Only in this way, that I had been there several days to procure a supply without success; and having obtained the direction of this child, I went to it in Somer's Town and took it to several patients, and at the end of the round I left it at Mr. Robertson's in Jermyn-street; but he was out, and I believe he went there the next day.

1770. Further than that you do not know anything of Mr. Robertson?—No, except as being a vaccinator.

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1771. Have you, as a medical man, felt any doubt as to the safety of obtaining lymph, or of obtaining a child under vaccination from the Small-pox Hospital, in consequence of any supposed danger of your obtaining the small-pox infection instead of the vaccine disease?—No, I should never trouble myself about it.

1772. What do you think of the possible danger of receiving the small-pox instead of the vaccine disease from thence?—I do not think there is a bit more danger on that account, because it is quite a different part of the house.

1773. Did you feel any alarm at taking a child under vaccination from the Small-pox Hospital, by the recommendation of the Small-pox Hospital, on account of any imaginary danger in giving the small-pox instead of the vaccine disease?—Certainly not; if the Small-pox Hospital were in my immediate neighbourhood, I should subscribe to it, and take all my supply from it.

1774. Should you feel any hesitation in sending a child to the Small-pox Hospital for vaccination, on account of its proximity to the Board for small-pox patients?—Not in the least.

1775. Have you never heard of any mistake in obtaining lymph from the Small-pox Hospital?—I know nothing of it, because I never took lymph in that form; I always have a child.

1776. Then if you have the child itself, you of course perceive, from the appearance, that the child has the vaccine disease?—Yes; and it is on that account I am very particular in selecting the child myself.

1777. Are you of opinion that the small-pox disease can be conveyed by clothes on persons?—There have been various grounds stated for that; but the medical experience upon that subject is so limited now, that it is hardly possible to judge; but I have known a washerwoman infected by washing the clothes.

1778. Must not a professional practitioner come in contact with many small-pox patients, inasmuch as the cases where he is required to attend families are frequently in consequence of the small-pox having shown itself in the family?—I can hardly suppose it possible but that a medical man in town would have occasion to see cases of small-pox, many of them cases after cow-pox; I do not know that there are any professed vaccinators, except those who are in general practice.

1779. Are there not some persons, particularly the professed vaccinators of the Board, or the vaccinators at some private institutions, who vaccinate a much larger number of patients than other general practitioners?—I doubt that very much, except those that apply to them publicly; I mean that they would not vaccinate a larger number of their own personal private patients.

1780. Have you ever applied to the station of the London Vaccine Institution for a supply of lymph?—I did, upon one occasion, during the life of the late Dr. Walker, when I had to vaccinate a patient in that neighbourhood.

1781. You said you applied to the Small-pox Hospital in consequence of the failure at the stations of the National Vaccine Establishment; were you not rather inclined to apply to the Small-pox Hospital, on account of your private friendship with Dr. Gregory?—I went to the only two of the national stations that I knew, and that I have been in the habit of applying to.

1782. You have stated that the Small-pox Hospital do not encourage medical men to apply to them for lymph; do you conceive that their object is to swell the number of persons that apply for vaccination at the hospital?—No, because they vaccinate gratuitously all the cases that are sent to the hospital, and the applications made to them for lymph by medical men were for their own private patients; I believe it was simply that they wanted to increase the amount of their subscribers.

1783. Did not they think it possible that the public confidence in vaccination might be shaken by a public and open connexion with the Small-pox Hospital?—There are some that are so readily alarmed, that I cannot say to what extent their fears might go.

1784. Do you not think that an alteration of the name of that part of the establishment which is for the support of vaccination would remove that objection?—Possibly it might, but I have been told that the Small-pox Hospital at present are encouraging the establishment of district stations for vaccination. Now the connexion of those with the Small-pox Hospital can never frighten anybody.

1785. If the Small-pox Hospital by receiving subscriptions from the public in support of vaccination exerts itself to spead vaccination, can you see any reason why it should be excluded from participating in any grant which Parliament is pleased to give in support of vaccination?—I cannot see any reason why it should be

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be excluded from it; but if that prevented the public from supporting the National Vaccine Board, I must confess I should rather be averse to that, because I have a great feeling in favour of the National Vaccine Board being continued, simply from a fact that came within my own knowledge, that some years ago there was an institution, supported merely by private subscriptions, in Broad-street, Golden-square, for the purpose of supporting vaccination; that sank gradually; at last it was kept up by the subscriptions, not of the public, but of medical men, for the purpose of obtaining a supply of lymph; but even then it fell off so much that they went considerably beyond the income, and at last that institution was dropped; and my opinion is that if the Government were to do away with the stations of the National Vaccine Institution, the private ones would either get very badly supported or very badly managed, in both of which respects that one in Broad-street was pre-eminent.

1786. Do you not know that that institution was carried on for 26 years with an income of only 200*l.* a year?—Yes; but latterly it fell down, I think, as low as 50*l.*

1787. Have you ever examined as to the amount of the grant that the Vaccine Board receive, and the economy with which that income is expended?—No, I have not.

1788. Do you think, as a deliberative body, upon the nature of the disease and the various anomalous cases that may occur, the board of medical and surgical men is, in the present state of our knowledge of the vaccine disease, of any particular utility?—I think that the members of the profession to whom that has been confided are not those that know much about it; that is, it is not in their department; they have little or nothing to do with vaccination; consequently they are merely sitting in judgment upon the reports they have received from different stations.

1789. You think that the institution is of more use to the public in its executive department than in its deliberative department?—Decidedly.

1790. Do you not think that the circumstance of the Government taking upon itself the support of institutions for any public object has generally the effect of indisposing individuals to contribute in support of the same object?—I am not aware of any instances in which the Government contribute partially to the support of any charitable institution.

1791. Are you not aware that they have granted funds in aid of the Refuge for the Destitute?—That is not a medical establishment, and, therefore, I am not acquainted with it; but it appears to me that one of the great reasons against the Government taking away its support from the National Vaccine Establishment would be on account of medical practitioners in the country who are in the habit of getting their supply from it without any expense.

1792. Do you not think that the mere circumstance of giving exclusively to one institution the privilege of sending and receiving its packets free of postage is almost alone enough to deprive the other institutions of that support which the public would otherwise be inclined to give to them?—I think that, for the good of the public, that privilege should be given to all.

1793. Do you not think it probable that as, even under those disadvantages, many private institutions are enabled by subscriptions to support themselves, if the privilege of sending the packets of lymph free of postage were given to them, they would supply the lymph to practitioners in the country much more extensively than they now do?—Very likely.

1794. If the National Vaccine Institution were done away with how would the country practitioners get supplied?—Unless the Government gave the privilege of sending it free of postage, I think they would experience great difficulty, because they frequently cannot get relays from week to week; and if they met with difficulties in getting a supply from London, it would materially retard the progress of vaccination.

1795. Do you mean to say that the Vaccine Board might be done away with if a regulation were made for enabling lymph to be sent free of postage from some other establishment?—I think that would make a material difference; but unless you can secure a frequency of stations in the different parts of London, I am afraid that it would throw great difficulty in the way of practitioners in London obtaining a supply.

1796. Supposing you were a practitioner in the country, should you be satisfied with obtaining a supply from London sent by the post?—I should not have been with the London Vaccine Institution, as conducted by the late Dr. Walker, because

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he used always to take the lymph two days advanced beyond what I think is in the best state.

1797. Should you be content to take lymph by the post from the Small-pox Hospital?—I should, if I could not get any better.

1798. Do you mean to say that the lymph supplied by the Small-pox Hospital is not so good as that supplied by the stations of the National Vaccine Board?—I should prefer the station in Jermyn-street to either the Small-pox Hospital or the general station of the National Vaccine Board, because they have it only twice a week; whereas at the other institutions, having it every day, they are constantly tempted to take it upon the ninth day and the tenth day; and that, in my opinion, is not so good.

1799. The facility of obtaining lymph upon any particular day, of course, would be increased by multiplying the number of stations?—Yes.

1800. Supposing the Government were to grant funds in aid in this manner, that upon condition that individuals subscribed in support of any particular institution two-thirds, the Government would grant in aid the remaining one-third, reserving to itself the power of regulating the provisions of such institution, that is, seeing that proper stations were appointed, and that proper medical men were appointed: do you not think that the grant of any definite amount in that manner would go much further in aid of vaccination than the grant that is now given by Government in support of the Central Board?—I hardly see that, because at present the Government support a great number of vaccine stations throughout London, and the vicinity of London. Granting that private subscriptions would support a great number, I do not believe they would support anything like that number; and I should say there is a great advantage in multiplying the district stations.

1801. Is it not necessary that, for the purpose of keeping up a constant supply at each station, you should have a considerable number of persons vaccinated at that station?—Yes; but, as Mr. Robertson has stated, the reason why a great number of cases do not come to be inspected at the appointed time after the vaccination is on account of the distance at which they reside from the station; there is much greater difficulty in getting them to come again than there is in getting patients to come originally.

[*A Paper was shown to the Witness.*]

1802. Will you have the goodness to look at that return of the distribution of the grant given by Parliament, and say whether, if you had to organize an institution for the support of vaccination, that is the manner in which you would distribute that income, consistently with economy?—I see no objection to the sums to each of the vaccinators, and to one superintendent; but I think a great deal of the rest is thrown away.

1803. Is it necessary, in the present state of the knowledge of the disease, to have a medical board of men, high in their profession, receiving incomes?—I see no reason for it.

1804. Although it might be necessary, when the public mind was very unsettled as to the nature of that disorder, that there should be something to give an authority to the practice of vaccination, is it your opinion that the authority of such a board is now necessary for the purpose of diffusing the practice of vaccination?—I see no reason for that.

1805. Do you think that the deliberations of such a Board are necessary to investigate any forms of the disease that many appear to be anomalous?—I doubt their ever doing so.

1806. Supposing the Vaccine Board were done away with, and the chief superintendence of vaccination were committed to a single individual, what should you think would be the proper salary for such an individual?—There would of course be a house found him for the establishment, and taking so much for his house being saved, and his taxes being saved, I should think it would be easy to secure a competent person for 300 *l.* a year; I think there are a great many army surgeons who would be glad to take a thing of that sort for 300 *l.* a year who would be competent for it.

1807. Do not you think that the public have a right that the reports of the cases should be vouched by men of established character?—Decidedly; I think if you had one person whose sole duty was to look after it, he would act more efficiently than the present inspectors appear to act.

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1808. Are you aware of any publications issued by the present Vaccine Board giving the result of the experience of the Board in vaccination; for example, as to the number of cases of small-pox that can occur after vaccination, or as to the proportion in which other cutaneous diseases occur at the same time?—No, I do not think it possible, because half of those patients who come to be vaccinated gratuitously are lost sight of.

1809. Do you mean to say, that no valuable result could be collected from such patients as you can take cognizance of?—They would be valuable, as far as they went; but as far as statistical information went, it would be so imperfect, that I do not think much good would be gained from it, because I should think that out of 20 applicants that are vaccinated in one day, not more than four will come again.

1810. Do you think that one individual, giving his time to it, would be able to give better information, as the result of the experience of the establishment, than what can be expected from a board composed of a multitude of high officers extensively engaged in their own individual practice, having the duty divided amongst them all, and none being particularly responsible?—I suspect that no observations have been made by the Board upon this point; in the first place, there are very few data upon which they could ground those observations, and very few observations have been made; but I have observed, in the few visits I have made to the Small-pox Hospital, that there is a great deal more observation made there, and more pains taken in investigating those cases, and also the physician of that hospital has occasionally published observations and papers upon those points, in which he has given to the public a variety of information upon the vaccination connected with that institution.

Mr. *Peregrine Fernandez*, called in; and Examined.

Mr. *P. Fernandez.*

1811. YOU reside in Lamb's Conduit-street, and you are surgeon to the parishes of St. Andrew and St. George the Martyr?—I am.

1812. Have you made any applications to the stations of the National Vaccine Board for a supply of lymph?—To the station in our neighbourhood I used to apply, when first the Board was established under Mr. Sawrey in Bedford-row.

1813. What was the result of the applications you made to that station?—At the time I applied to the station, I was not successful in inoculating with dry lymph, and therefore I wished to take a patient with me; Mr. Sawrey refused to give me that accommodation, and therefore I applied to the Small-pox Hospital.

1814. How long ago is it that you made those applications?—It is a great many years ago.

1815. When you have wanted a supply of lymph since that period, where have you applied to?—Except in a few instances, where there have been successful depositories of vaccine matter, always at the Small-pox Hospital; that is to say, if I wanted matter in St. George's Fields, I should go to the institution there. At one time when Mr. Carpue was an extremely successful vaccinator in Percy-street, I should have gone there.

1816. Do you mean that the efficacy of the point armed with the dry lymph is so uncertain that you invariably, if you can, obtain a child in preference?—Not now, but I use the lancet always.

1817. Where do you generally obtain the supply of armed lancets?—Always at the Small-pox Hospital.

1818. What induces you to prefer that station?—The most ready attention to any application I make.

1819. Are you a subscriber to the funds of the institution?—No.

1820. Did you ever hear it laid down as a rule that a medical man should not receive a supply unless he was a subscriber?—I was quite surprised when I heard that said just now, because I have seen several gentlemen there who I never understood were subscribers. I must say that, as the parish surgeon, when small-pox has been spreading, I send patients up there, and I am accommodated with their vaccination frequently, or if I want matter to arrest the progress of small-pox in our workhouse, I can get it at any day or at any hour.

1821. Do the parishes to which you are surgeon make any annual subscription to the hospital?—Our parish, in common, I believe, with many others that send patients, have sent a donation every year for small-pox cases; at first they gave a donation, but I believe now they give a guinea a case.

1822. Has any apprehension ever come across your mind in receiving lymph from the Small-pox Hospital, in consequence of any danger of your receiving

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small-pox instead?—None; because, in the first place, I am old enough to remember when the small-pox was general, and no one ever thought of altering their dress because they came from a small-pox patient; in the second place, I could have no dread; there the patients are vaccinated in an immense room extremely well ventilated; between them and the small-pox patients there are two large and lofty wards, and besides that, the small-pox patients are up stairs in various wards.

1823. Have you ever heard of any case of a child being sent to the Small-pox Hospital for vaccination, and catching the small-pox during its visit there?—No, I never heard of it; and I should be surprised at it, because my practice lies very much in that neighbourhood, and I do not find the small-pox at all more general in that neighbourhood than anywhere else, and under such circumstances I do not think that the Hospital is by any means a depository of the small-pox disease.

1824. Is there any indisposition in the neighbourhood from any apprehension of that sort to send children for vaccination?—Not at all; I see them going there in crowds.

1825. Do you vaccinate parish children yourself from the points you obtain, or do you send for them to the Small-pox Hospital to be vaccinated?—I should vaccinate them myself, because it is my duty, and we have an order that they should all be vaccinated; but I am very much disappointed in carrying that into effect in consequence of the prejudices of the poor.

1826. Can you state anything as to its being the practice in London, upon the part of the poor people, to have their children inoculated with small-pox by itinerant practitioners?—I know nothing of any such thing, nor do I ever remember, since the institution of vaccination, having met among the poor with a case of inoculated small-pox; the prejudice being once got over they soon ran into the vaccination.

1827. Do you find the prejudice on the part of some mothers against vaccination?—Yes.

1828. To what do you ascribe it?—To the idea that they will get some other disease by it, and, occasionally, from false religious views, they would rather leave it in the hands of Providence.

1829. You are acquainted with the mode of vaccination at the Small-pox Hospital?—Yes, and I prefer it; they wound the skin. I did not succeed at one time with a dry lancet, and I attribute it entirely to the prejudice that I have, in common with other medical men, that if you punctured the true skin, and there was much bleeding, it washed away the infection. Now, the bite of a mad dog is never washed away by the bleeding of the true skin; but the truth is, that being a susceptible part, the wounding makes the vaccination succeed better than it would otherwise, and, therefore, having once made a wound with a poisoned instrument upon a most nervous part of the body, an impression is more sure to be made; and I wish to add one thing more, that the success in vaccinating in that way, I think, stands to reason as being more certain; and, in the next place, I never went to the Vaccine Institution when I did not inspect all the patients that I could see, and I have never seen a sore arm from the numerous punctures, and the deeper punctures made in that institution, and if I were to say that I have seen many hundreds I should speak very much within the truth.

1830. Did you ever hear of a want of success with regard to the patients vaccinated at the stations of the National Establishment?—By no means; but even there, when vaccinators vaccinate rapidly, they are more apt to make the arm bleed than in the careful manner in which it is done, under the impression that the bleeding would wash away the poisonous infection.

1831. Is not the child put to more pain in that mode?—You must set against that, upon the other side, the inconvenience of making the puncture over again when it has missed, and the alarm both to the child and to the mother.

Mr. *William Henry Cooke*, called in; and Examined.

Mr. *W. Henry Cooke.*

1832. YOU are a general practitioner, residing in the New Cut?—My surgery is in the New Cut; I reside in the York-road, Lambeth.

1833. Will you state where you are in the habit of obtaining your supply of vaccine lymph?—I am now in the habit of obtaining it from the Small-pox Hospital, but formerly from the late Dr. Walker, in Salisbury-court.

1834. You live close to one of the stations of the National Vaccine Establishment at Rowland Hill's chapel?—My surgery is near that station.

1835. Have

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1835. Have you met with any difficulty in obtaining a supply from that institution?—I have.

1836. Will you state the nature of the difficulty you met with?—It is the most convenient station to my surgery, where I have practised 16 years, during which time I have occasionally sent my assistants to that station, (I never applied personally), and they have invariably returned without the fluid; the excuse has been, that having so much to supply to the army, they had none to spare.

1837. Then the result is, that you have met with great difficulty in obtaining a supply from that station?—Always; and, in consequence, I never sent there lately but as a last resource, feeling almost sure I should be disappointed.

1838. Do you meet with every facility in obtaining a supply from the Small-pox Hospital?—Yes.

1839. Have you anything to complain of as to the quality of the lymph supplied?—I had; I failed several times with the fluid I obtained from the hospital, in consequence of which I went there and saw the vaccinator; I complained of it, and asked him on what day it was customary to take the lymph, for I am myself very particular, and take it always upon the eighth day; I find, after that time, it loses its virulence. He said he was not in the habit of taking it upon any fixed day; that he succeeded as well upon the ninth as upon the seventh; but he never sent out lymph to any medical men except such as, he felt assured, he should succeed with himself; "however," he remarked, "we shall have some patients here presently, and you can see it taken." I replied, if you have a patient who was vaccinated this day week, I should like to take it; I waited, and took some lymph that morning; it succeeded amazingly well; and I have since vaccinated many children from that lymph.

1840. Upon your expressing a desire to have it upon the eighth day, did you find any difficulty in obtaining a supply of lymph taken upon the eighth day?—Quite the reverse.

1841. Are you a subscriber to the institution?—No.

1842. Are you connected with any parish or any board which subscribes to that institution?—In no way whatever.

1843. Then, as a medical man, you have found no difficulty in obtaining a supply, but a disposition to meet your wishes?—Certainly a disposition to accommodate.

1844. Does any apprehension come across your mind of your communicating the small-pox instead of the vaccine disease, in consequence of your obtaining a supply from an institution such as the Small-pox Hospital, which has wards for the reception of patients under small-pox?—Not the most remote; I should have no hesitation in taking my own child to the Small-pox Hospital to be vaccinated.

Mr. *John Ford,* called in; and Examined.

Mr. *John Ford.*

1845. YOU are a general practitioner, living in York-terrace, Limehouse?—Yes.

1846. Where have you been in the habit of obtaining a supply of lymph?—Originally, from Dr. Walker; since his death, from the Small-pox Hospital.

1847. Are there not two national vaccine stations which are nearer to your place of business than the Small-pox Hospital?—So I have been informed, but I did not, till lately, know that to be the case; for, in fact, almost every house now is a national vaccine establishment, at which vaccination is performed, for the sake of popularity, and, therefore, we are not able in that particular to distinguish one house from another; I have been given to understand that there is one in my neighbourhood, conducted by Mr. Harkness, and I think another, by Mr. Ward, in Wellclose-square, the former being the one nearest to me.

1848. Were you aware that there was that station at Mr. Harkness's?—I was not aware of it till within the last week.

1849. If you had been informed of it, should you have preferred obtaining your supply from thence?—Certainly not; in the first place, being a neighbouring practitioner, I should have been afraid that he might think I had some other view than merely getting a supply of lymph in going to his house, perhaps to inspect into his private concerns; and another reason is, that I have been so often to branch stations, and so unsuccessfully, that I have proved that I can obtain the virus more easily from the principal station, and I go there in preference.

1850. What branch stations do you refer to, where you say you have been disappointed?—I have sent my assistants to what I have been lately informed are national stations.

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1851. Do you know what stations you sent to?—I sent to Mr. Harkness's, I believe, and also to Mr. Ward's, and I have been disappointed in obtaining a supply.

1852. Have the grounds been stated of their not being able to furnish a supply?—I think upon one occasion I was informed that it was not the right day, that they only inoculated twice a week, and that in consequence I could not be supplied.

1853. Have you been always able to obtain a supply of lymph from the Small-pox Hospital?—Always.

1854. Are you a subscriber to it?—No, any further than I generally leave a shilling in the poor-box when I go.

1855. Has no apprehension come across your mind of the danger of giving the infection of small-pox to your patients?—I never had such an idea.

1856. Should you scruple at all in taking a child to the vaccine-room of the Small-pox Hospital from any apprehension of that sort?—I certainly should not.

1857. Have you ever personally applied to any of the national vaccine stations?—No.

1858. Now you are informed of the two small stations in your neighbourhood, would you go there in preference to the Small-pox Hospital?—Certainly not; I partake of what may be called a general feeling in such cases; I should not like to be standing about at another medical man's house; I would much rather go to a public institution.

1859. If you knew that Mr. Harkness's was *bonâ fide* a national vaccine station, should you have any objection to go there?—I should not like, as I said before, to wait at the door of a neighbouring practitioner.

1860. Do you follow the method of vaccinating followed at the Small-pox Hospital, of somewhat deep incision or more superficial?—More superficial; I do not like their plan at the Small-pox Hospital; they perform it coarsely and unprofessionally; there always appears to me something very cruel in the manner in which they rip up the skin and make four or five sores in the arm; one pustule is as good as a hundred.

1861. Is it not possible that many mothers would object to that?—I should object to my child being thus operated on.

1862. What do you think would be a fair remuneration to a general practitioner from a public institution for carrying on vaccination in the house of such practitioner two or three days in a week for an hour?—It is mere matter of opinion; I should think they would be well paid at 20 *l.* a year.

1863. Should you be willing to undertake it at 20 *l.* a year?—Certainly I should.

[*A Paper was shown to the Witness, containing a Return of the Names and Salaries of the National Vaccine Establishments.*]

1864. Will you look over that statement of the remuneration to the vaccinators of the National Board, and say whether you think it is more or less than respectable general practitioners ought to be satisfied with?—This list astonishes me; I had not the slightest conception that such salaries were paid.

1865. What is your opinion of the payment they ought to receive?—I think if they were paid 10 *l.* a year they would be amply paid; in fact, many persons are making efforts to get patients. It is considered introductory to practice, and is a means of obtaining popularity; and, in reality, I think they would rather give 10 *l.* a year to have patients sent them, than be deprived of the advantages resulting therefrom. It is considered a source of introduction to other practice and patronage, and therefore the greater the number of persons that come to them the better they like it.

1866. Do you speak from any knowledge with regard to the vaccinators of the National Establishment?—I do not: I am speaking generally.

1867. With reference to the scale of salaries which are put down here, for a person attending once or twice a week for one hour during each of those days, you think that a scale of remuneration extending from 150 *l.* a year down to 50 *l.* is more than adequate pay for the work done?—I do indeed; I think it is a hardship upon the public to pay such sums when the benefit might be conferred free of expense.

1868. Are not the general practitioners in London in the habit of vaccinating the poor gratis?—Always.

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1869. Are you yourself in the habit of vaccinating the poor gratis?—If any of my patients are poor I always recommend vaccination, and do it for them gratuitously.

1870. Do you think the circumstance of having a Vaccine Board composed of surgeons and physicians high in the profession, at all contributes to diffusing the practice of vaccination?—Not at all; I think it is so universally accepted now, that the Board is quite unnecessary.

1871. Were you aware that there was a Board constituted for superintending the labours of the twelve vaccinators?—I was not; I never had an idea of such a thing.

1872. Did you know the names of the Vaccine Board before you looked at that paper?—No.

1873. Do you think that the lower classes generally, who are supposed to have a prejudice against vaccination, are aware of the persons of high character and reputation who compose that Board?—I think they are totally ignorant of it. This, in my opinion, ever has been a secret to the public.

1874. Do you believe that amongst the public in general the names of the Vaccine Board are not known?—I do.

1875. Are you aware of the numbers that resort to Mr. Harkness for vaccination?—I am not; I should think the number very small, and, from his description of practice, think he would prefer the few to the many. I should have thought that so respectable a house as Mr. Harkness's would never allow a parcel of poor persons to be flocking round the door; I should be very sorry to see them round my own.

1876. Why should you?—I do not like the appearance.

1877. You were understood to say that it was a great advantage to a medical practitioner?—Yes; medical gentlemen entering into practice and wishing to obtain popularity consider it a very great advantage; but I have a good practice, which answers my purpose without it.

1878. Do you consider that the superintendence of a Board such as that is necessary for the purpose of the regulation of the practice of vaccination, and keeping alive a constant supply of lymph?—Not at all; but I think such an institution as the Small-pox Hospital is very useful to the profession for the purpose of obtaining a supply of lymph; I think it would be a great loss to us if we had not that institution to resort to.

Jovis, 25° die Martii, 1833.

HENRY WARBURTON, ESQ. IN THE CHAIR.

James Carrick Moore, Esq., called in; and Examined.

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1879. HAVE you been engaged in the medical profession?—I was a practising surgeon in London, and I left the profession in 1823.

1880. You possess an intimate knowledge of the history of vaccination?—I do.

1881. Were you well acquainted with the late Dr. Jenner?—Upon the discovery of vaccination in the year 1796, I was extremely struck with this great discovery; I particularly studied it, and applied myself closely to it during the whole period of my acting as a surgeon in London until 1823.

1882. Were you well acquainted with the circumstances which led to the institution of the National Vaccine Establishment?—I was. Being an intimate friend of Dr. Jenner, and applying myself very much to the subject, I was of course a member of the Royal Jennerian Society, which was established by Dr. Jenner soon after his discovery. The Royal Jennerian Society was established in the year 1803; it was a subscription society for the extension and diffusion of the vaccine. That society fell into great disorder; there was not sufficient power in the government of the society to keep good order and good regulations among the executive officers. The consequence of the feuds was a dreadful contest, which ended in the dissolution of the society. The contention was owing to this: Dr. Walker had been appointed principal vaccinator; he disregarded the instructions of Dr. Jenner, and of the medical committee, who were appointed to regulate the practice, and chose to

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vaccinate in a manner that was considered by the medical committee and by Dr. Jenner as extremely barbarous and violent, and directly the reverse of the plan that was pointed out to him as his duty by the medical committee, who were authorised to superintend the practice. The mode that he chose to adopt and to recommend was, to open up the vesicle, to take off the whole cuticle that is over the vesicle, and to lay it entirely open, then to wipe out the whole fluid contained in the vesicle, and to wait until the formation of a fresh fluid should take place; and this fresh fluid he conceived was the proper vaccine fluid. This severe method struck with great disgust the medical committee and Dr. Jenner; they remonstrated with Dr. Walker, but he was a man not to yield to any remonstrances, he persisted in his plan, and published it in the medical journals of the day as a superior plan to that recommended by Dr. Jenner and by the medical committee of the Jennerian Society. No measure could be adopted but that which Dr. Jenner then adopted, which was to call a general meeting of the society, and to expel him; he was remonstrated with again and again, but he was a man quite intractable, indeed a very peculiar character. This contest produced violent dissensions in the Jennerian Society; a great party supported Dr. Walker, but that party proved ultimately the minority; but when he was deprived of his situation, his friends seceded from the Jennerian Society, and formed the London Vaccine Institution, which he, with great impropriety, also called the Jennerian Society, although Dr. Jenner refused to belong to it. Indeed he was the person by whose motion Dr. Walker had been excluded. In consequence of this a great portion of the funds of the Jennerian Society failed, and another gentleman was appointed in the room of Dr. Walker. I have here a work which I wrote upon the subject, but I see I have not stated the name of Dr. Walker's successor in that work. He was a young man, strongly recommended, a good-natured well-disposed youth in some respects, but excessively idle and negligent.

1883. Is the history of the institution detailed in the work now before you?—It is; it is a history of vaccination written by myself, and which was published in the year 1817. The Jennerian Society was injured in its reputation by this controversy; the new vaccinator was negligent; the business was ill-performed; and few persons came to be vaccinated at it.

1884. What is the date of those transactions?—This occurred either in 1807, or at the beginning of 1808. Dr. Jenner found that his discovery was making no progress in the world; he was in dismay. I had the honour of being intimate with him, and considered the subject with all the attention that was in my power, and, as his friend, went to him, and suggested what struck me as the only plan by which vaccination could be well established in the country; namely, to place it under the control and management of the Royal Colleges of the Physicians and Surgeons of London.

1885. Did you hold any situation in the Jennerian Society?—I was only a subscriber.

1886. Had you been a subscriber to the institution in Broad-street?—No, I was not. Dr. Jenner approved of my advice, and accordingly went to Sir Lucas Pepys, who was then President of the Royal College of Physicians, and made the proposition to him; Sir Lucas Pepys, a man of great philanthropy, and an eminent physician, approved of the idea highly. A plan was drawn up, and presented to the Honourable George Rose, then Treasurer of the Navy, and carried by him to Lord Hawkesbury, who was the Secretary of State for the Home Department; it was approved of by those persons in office; it was proposed to Parliament by Mr. Rose, and the institution established by a vote of Parliament; the opposition to it was very slight indeed, only about five Members of the House of Commons objected. This institution did me the honour to appoint me Director of the National Vaccine Establishment. My office was to superintend the practice of the vaccinating surgeons; to draw up orders and regulations for their conduct; and to carry on the general correspondence which then existed with the National Vaccine Establishment: and it was my duty to visit all anomalous cases, and to report them to the Board.

1887. Did you perform those duties which are now performed by the registrar and the inspector?—There was then a registrar besides.

1888. Then you performed the duties which are now performed by the inspector?—Chiefly those performed by the inspector. My duties were extremely laborious; the correspondence was immense from all parts of the empire; and in visiting the anomalous cases that occurred of suspected failures much time was occupied;

I was

I was even obliged occasionally to go distant journies out of town, so that my salary, I considered at that time, was very small in comparison to the duties I had to perform.

1889. What was your salary?—£. 200. a year; and I attended all the Boards. I may venture to say that that establishment at once acquired the complete confidence of the medical profession throughout the British empire, and from that moment vaccine lymph was diffused everywhere of the purest kind, and instructions given that have proved successful and judicious.

1890. Do you attribute the failure of the Jennerian Society to the want of a proper control over Dr. Walker and his successor?—One general cause was that of the misfortune of having chosen bad persons; but the public over all the British dominions are well acquainted with the chiefs of the medical profession, and they yielded their confidence to them; but they could yield no confidence to such men as Dr. Walker, or anybody else who was appointed, they being obscure persons. But the reports coming from the chiefs of the medical profession in London, from the two Royal Colleges, gave a confidence all over the world, so that there was no further doubt about what was proper among all reasonable men.

1891. Can you state what connexion, at its first establishment, Dr. Jenner had with the National Board?—Dr. Jenner was the proposer of the National Board; he was nominated Director, and I was nominated Assistant-Director; but he took offence at one or two other appointments, and was so much displeased and so much alarmed at these appointments which he did not approve of, that he declined the office of Director. I corresponded with him at the time, and advised him strongly against the resignation, but could not prevail with him.

1892. Was the falling off of the funds of the Jennerian Society owing to the secession of Dr. Walker's partizans?—The funds were never sufficient, and of course they declined very much after that great secession.

1893. Were there any complaints made to the society as to the injudicious application of a portion of the funds?—I must confess that the financial part I never attended to, I cannot give any information upon that point.

1894. Should you consider it safe that the chief vaccine establishment should be left to the support of private charity?—The objections to it are so numerous, that I find it difficult to know where to commence. I conceive that if it were trusted to private charity, the practice of vaccination throughout the empire would instantly decline to a prodigious degree.

1895. Will you state the reasons for that opinion?—The practice of vaccination never has been successful, in any part of the globe, but where it has been supported and encouraged by the various governments. It made no progress in France till Buonaparte established it on a splendid footing, then it was carried over the whole country with success, but always with difficulty. The difficulty proceeds from the apathy of the lower class of people in considering future danger. The higher orders, from superior intelligence, usually get their children vaccinated, but the great mass of the people totally neglect it, unless urged by some pressure; hence the necessity of the interference of Government.

1896. What have you to say to the great diffusion of vaccination in the British possessions in the East Indies with very small exertion of the local Government?—I was well acquainted with the establishment of vaccination in the East Indies, and I have understood that that was done by great exertions of the Government.

1897. Have you been in India yourself?—No; my knowledge of the facts as to India proceeds from being director of the National Establishment, and corresponding with the medical men in India.

1898. Are you aware that, after its first introduction, it became so common that the natives of India learnt the practice, and it became general, without even the assistance of medical men to diffuse it?—I understood that the reverse of that was the case from medical gentlemen of high authority who came from India. Upon its introduction into India the Brahmins opposed it at first; the Governor-general of India (Lord Wellesley) resolved to establish it, and finding it opposed, a number of the principal Indian inoculators of the small-pox were sent for to Calcutta, and an inquiry was made of the amount of their gains by that practice. This proved to be a mere pittance, on which double the sum was proffered them, with the slight stipulation, that they should adopt and recommend vaccination in preference to the variolous inoculation. All readily acceded to the conditions. An office of a superintendent-general of vaccination was appointed to witness and to instruct those Brahmins in the practice. In this manner vaccination was diffused through

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the whole peninsula as far as Persia. In Ceylon similar measures were adopted by Governor North. Medical superintendents and overseers were ordered to propagate the vaccine by every means in their power. All persons who presented themselves were vaccinated gratuitously; and medical overseers made circuits to every village in their respective districts to vaccinate the people.

1899. What you have stated seems to show that, in order to introduce it in the first instance, the support of Government was very properly thought necessary, but it does not seem to show that, after it has once been introduced, and there is a strong public feeling created in its favour, that Government support is necessary to maintain it. Your attention is called to the following statement, made by Mr. Paul upon the 2d of July 1806, upon Lord Henry Petty proposing a reference of the whole subject of vaccination to the College of Physicians for consideration, preparatory to making a grant to Dr. Jenner. Mr. Paul upon that occasion states, "that he happened to live many years in the town of Lucknow, where there is a greater population than in any other part of the East Indies; the vaccine inoculation was there first introduced by men of science, although it afterwards came to be known and to be practised by people in the profession of physic two centuries behind us in the knowledge of medicine;" and after stating the ravages committed by the small-pox, he says, the people in that part of the world, so far from thinking it requisite that men of science should alone practice it, were convinced that it was only necessary to be performed by men of slight intelligence in order to be effectual. Does not that show that, however necessary and proper the support of Government may have been in the first instance, yet that when public opinion has once turned in its favour, that alone seems to have been sufficient to have kept it alive, and, accordingly, that men who are not medical practitioners are the persons who conduct the operation?—I presume that persons will never vaccinate without some reward; and there must be some party to reward those persons, whether they are men of science or men of no science that vaccinate the poor, because the poor can pay nothing. I know that in this country the difficulty to induce the poor to be vaccinated is very great, and even a Government institution is inadequate to effect it. By all the exertions that ever have been made both by the Government, and by the benevolent exertions of the profession and of individuals, all are inadequate to produce universal vaccination.

1900. Do you mean to say that even at present, or from the time even of the establishment of the Vaccine Board here, their object was generally to vaccinate gratis; was it not rather their object to keep alive, by vaccinating gratis in London, a perpetual supply of lymph, and to distribute the supply of that lymph to medical practitioners throughout the country?—I would say that the collection of the lymph is for the purpose of vaccinating the poor chiefly; the vaccination of the poor is the great object of the institution, and the poor cannot be vaccinated but by collecting lymph.

1901. What do you consider to be the objects of the National Vaccine Establishment?—The use of the National Vaccine Establishment, as I conceive, is to extend the practice of vaccination throughout the whole British empire, in the expectation of diminishing or extinguishing the small-pox.

1902. Are you aware of the numbers vaccinated during the last year?—Yes; in last year there were 14,190 vaccinated by surgeons of the National Vaccine Establishment, and the number of charges distributed was 100,513.

1903. Are you of opinion that the institution has answered the purpose of its establishment?—These numbers are the highest that have ever been vaccinated, and the greatest number of charges that have ever been distributed since its commencement, and it has gone on with a pretty regular advance to this height. The first year there were only 3,000 vaccinated, and from 3,000 they here mounted up to 14,190. The National Vaccine Institution, according to my impression, has answered every purpose that could be expected in the most complete manner, it gave confidence to the whole medical profession throughout the world; for such is the character of this establishment, that from France and from Germany, and from Berlin, as well as from Great Britain, the vaccine lymph is frequently applied for.

1904. Are you not aware that previous to the establishment of the National Vaccine Board, the character of the vaccine disease in foreign countries was fully established, and the opinion in favour of the disease as a preventive of small-pox?—I believe the medical profession in foreign countries in general entertained the best

best opinion of it, in consequence of the publications of Dr. Jenner and others, but it was long before the practice became general in foreign countries.

1905. Are you aware of a statement having been made in 1806, a year and a half before the establishment of the Vaccine Board, by Lord Henry Petty, on proposing that the nature of the disease should be referred for consideration to the College of Physicians, preparatory to making the grant to Dr. Jenner. Lord Henry Petty, after stating the difficulties that it had to contend with in England, states, "In 1799, this discovery gained its way over the whole continent of America, and even among the Indians it has been practised with a degree of success fully answering the most sanguine expectations of him who had first suggested it. In 1800, it was adopted upon the Continent, and under the auspices of our commander-in-chief it extended to the shores of the Mediterranean; afterwards, from its favourable reception at Naples and most of the Italian States, it gradually made its progress northwards; in Russia, Prussia and Denmark it was eagerly embraced; but I could wish to call the attention of the House in a particular manner to the success it has met with in the dominions of the House of Austria. In the year preceding its introduction in Vienna, the average amount of deaths occasioned by the small-pox was 835, but in 1799, the vaccine inoculation was introduced, and in 1802 the number of deaths arising therefrom was reduced to 61. In 1803 it was further reduced to 27, and in 1804 the actual number who died of the small-pox amounted to two persons only, and those were arrivals from the country." He afterwards goes on to say, that "In the East Indies alone there had been upwards of 800,000 persons inoculated in the space of a single year. In the empire of China too, its introduction has become general; it has been regularly successful in its effects in every part of the globe." Seeing how general its introduction was, and how successful it was, and how strongly the public opinion in foreign countries had set in its favour, can you reasonably attribute the opinion in favour of vaccination over the Continent to the establishment of the National Vaccine Board in London?—All the facts that have now been read were communicated to Lord Henry Petty by Dr. Jenner; the facts were all accurate and true.

1906. Was not this, in 1806, considerably previous to the establishment of the Vaccine Board?—Certainly; it was the exertions of Dr. Jenner and of his friends that had the effect which has now been stated; upon the bursting out of this discovery there was an immense deal of zeal, but everybody is aware that zeal cools, and after a short time the vaccine practice almost ceased in a great number of those countries; and I can state, as a pretty considerable proof of it, that within these three weeks Prince Metternich has applied from Vienna for vaccine fluid to the National Vaccine Establishment.

1907. Is not that a necessary consequence of keeping up a constant supply of lymph in this country, that other countries, knowing that it is so kept up, will be more careless than they otherwise would be in keeping up an independent supply of lymph themselves?—What they would do, I cannot tell.

1908. Is it not to be expected as a probable consequence?—I think the probable consequence of not keeping a supply here would be, that the practice would decline rapidly, and consequently small-pox would recur dreadfully.

1909. Is it not to be expected that if foreign countries could not obtain a certain supply of lymph from this country, they would be more careful themselves in keeping up an independent supply?—That may be conjectured; I cannot pretend to decide upon it whether they would or not.

1910. Is it not notorious that applications are made to this country for lymph from all parts of the world?—It is; and it is from the impression of the superiority of the vaccine lymph in this country.

1911. Do they consider that it is under the guarantee of Government?—Yes; and under that of the Colleges of Physicians and of Surgeons.

1912. Are you not aware that many applications have been made not only to the National Vaccine Board, but to the private institutions, for a supply of lymph; that the London Vaccine Institution, for instance, receive frequent applications from the agents for foreign countries?—I believe I can partly explain that: there was a deception employed in the London Vaccine Institution; they called themselves "The Jennerian Institution," they pretended it was approved of by Dr. Jenner; and foreigners, ignorant of that circumstance, and even our own countrymen in remote parts of the country are not aware that Dr. Walker was expelled from the Jennerian Society, by a motion made by Dr. Jenner in that society; but the deception

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continues to prevail, and some apply to them; otherwise I apprehend they would not.

1913. Is not confidence likely to be founded upon having made previous applications, and found that the supply of lymph was good?—Certainly; and I make no manner of doubt that the lymph is good in general; nor do I know how Dr. Walker latterly practised: the mode in which he practised when he was in the Jennerian Society was barbarous and cruel; but the lymph would still produce the vaccine disease.

1914. Mr. Wilberforce also states, upon the 10th of June 1808, upon Mr. Rose moving that the National Vaccine Board be established, "that in foreign countries there is a firm and decided opinion of the efficacy of vaccination to prevent the small-pox;" therefore it appears that it was the merit of the discovery of Dr. Jenner, and the knowledge that had been gradually increasing throughout the world of the real efficacy of the disease, as a preventive against small-pox, which was the real foundation of the opinion in its favour, and not the mere circumstance of a Board being established in this country for supporting it, since it appears that, previously to the establishment of the Board in this country, foreign Boards had been established in other countries for diffusing the blessings of vaccination; is not that so?—Certainly, the Government here never established the National Vaccine Institution until they had full evidence of the utility of it; and proofs of it were necessary previous to the establishment of the National Vaccine Institution. The business of the National Vaccine Institution was to extend the vaccine throughout the country. I know, for certain, that in the Mediterranean it was introduced at a very early period, through the influence of Lord Keith, who was admiral of the fleet; he introduced it among the seamen, and it was spread to Malta and Sicily; but I had full information that, in a very short time, it totally ceased there. Either the surgeons would not take the trouble to operate, or the people would not take the trouble of going to be operated upon; and the practice ceased entirely in a short time afterwards. Such is the fact every where; when the discovery is brought into a town, vaccination begins with zeal and ardour, and then declines.

1915. Do not you consider that the number of deaths that have occurred from small-pox proves that vaccination is not so widely extended as it might be?—I doubt whether one-half of the children born in London are vaccinated, consequently the small-pox is continually prevalent in London. The lower orders of people are filled with apathy upon the subject; and those that are in extreme poverty are not very anxious to take this measure for preserving their children.

1916. Do you concur in the opinion expressed by Mr. Davis Giddy, on the 9th of June 1808, upon Mr. Rose's motion, "that it was a wild idea to suppose that the small-pox could be exterminated by compulsion, and one that ought not to be entertained by Parliament for a moment; the people would, under such an impression, neglect the precaution of inoculation for small-pox and vaccination too, and then the disease of small-pox would break out with tenfold severity;" do you concur in that opinion, the substance of which is this, that in order to induce people to adopt the prevention, it is necessary that a certain portion of the disease against which you seek prevention should exist, otherwise the people will cease to have recourse to the preventive altogether?—If the small-pox were suppressed altogether, vaccination might be suppressed also, for there is no source of small-pox but contagion; and therefore, if the disease was altogether suppressed, it would be absurd to continue to vaccinate.

1917. In order to induce people to vaccinate, as a prevention against small-pox, is it not necessary that some degree of the evil against which you wish to guard should exist?—That argument, if it were carried to its full extent, would lead ultimately to the suppression of vaccination altogether, and to allow every child to take its chance. I should be glad to find that the small-pox did not exist in the British empire, even at the risk of the danger that is apprehended.

1918. Do you think that every facility ought to be afforded to vaccination?—I do; and every means possible to suppress the small-pox. I conceive that this Committee can do a most essential and important benefit to the public by understanding completely the subject, and by representing it correctly to Parliament. It was the opinion of Dr. Jenner, and it was also my own, and, I believe, the opinion of almost every medical gentleman of eminence in this city, that the great source of small-pox in this metropolis is the Small-pox Hospital. It is from that hospital, I conceive, that the contagion is continued perpetually through the town.

1919. By

1919. By what means?—The Governors of the Small-pox Hospital invite, for the purpose of preventing small-pox, the healthy children of the metropolis to assemble there, to prevent the spreading of the very infection that exists in the adjoining apartments. Last year, by the report of the physician, I find that upwards of 4,000 children were vaccinated at the Small-pox Hospital. Now when those 4,000 healthy children are carried from the various parts of London, with their parents and brothers and sisters, that will make a number of not less than from 8,000 to 10,000 or 12,000 persons who go within the precincts of the Small-pox Hospital. When they arrive there the children are all handled by the medical gentlemen of the Small-pox Hospital who are attending the patients with the small-pox, consequently, I conceive, impregnated with variolous contagion. Those children, after the operation is done, return in a few days to have their arms examined again by the same medical gentlemen; and the servants of the institution are coming backwards and forwards into the apartments. The children must return commonly on the eighth day for the fluid to be taken from them to vaccinate others; they make in general three or four visits, and those children afterwards, with their parents, having been exposed to variolous contagion, go through the town to the places where they live. That I conceive to be the great source of keeping up the small-pox in this town; and it must be kept up, I think, as long as that baneful practice is continued.

1920. Do you object to there being an institution for the reception of patients who accidentally catch the natural small-pox?—The very reverse. It is wise to have a Small-pox Hospital.

1921. Then the part you object to is the children being brought to be vaccinated to a part of the building in which the wards of the small-pox patients are situated?—That is one objection; the next is, that those children are attended by the medical gentlemen of the Small-pox Hospital, by which they come into contact with the persons that have charge of the small-pox patients.

1922. Do you state this circumstance as a matter of opinion, or as having been able to trace in any one case the carrying of small-pox by those children from the room in the Small-pox Hospital where they are vaccinated, to the persons in the family to which they return?—I know no such case.

1923. Then you state it only as a matter of opinion, as a medical man, that this must be the consequence of the practice referred to, but it is not from having been able to trace in any case that the small-pox has been propagated by that practice?—I have no case in point: but I state it not from an opinion merely, but from the knowledge I have of the diffusive nature of the variolous contagion, and of that of most other infectious diseases. The distance to which the infection of the plague and typhus fever, and all the various infectious diseases, is carried, and the mode in which infection is conveyed, is often very mysterious; but there are such a vast number of facts which have established that those contagions may be communicated by clothing, and by persons moving to a distance, that I have no doubt of the truth, nor do I believe that any eminent medical man doubts that contagion may be conveyed by clothing, and by persons carrying it from one person to another; but when the circumstance occurs, it is extremely difficult to ascertain it. When a child is attacked with small-pox in the City of London, the physician knows that he got it from infection, but he cannot discover where the infection came from. The small-pox is in the highest degree infectious, and consequently, I think, it is most unfortunate that vaccination should be conducted at the Small-pox Hospital. If from motives of humanity and philanthropy the governors of the Small-pox Hospital choose to have a vaccine station, I think that they ought certainly to put that Vaccine Institution at such a distance from the Small-pox Hospital as to render it impossible that the contagion should reach it; and in the next place, that the medical officers and servants that attend that Vaccine Institution should be positively prohibited ever entering the Small-pox Hospital, and if they did, should be instantly discharged, then the governors of the Small-pox Hospital would perform an essential benefit, but at present they are doing infinite harm from ignorance.

1924. Are the stationary vaccinators of the National Vaccine Board prohibited from entering houses where there is a small-pox patient, and from attending to those requisitions which are frequently made to them to vaccinate the inmates of a house in order to save those inmates from the danger of catching the small-pox from a patient who is ill of the small-pox in that very house?—No such prohibition exists.

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1925. Then do you not think, that of necessity the vaccinators under the National Vaccine Board, or vaccinators under any circumstances, must be instruments of carrying about the small-pox, if the opinion you have expressed, in reference to the danger from the Small-pox Hospital, be true?—I certainly think, that if the vaccinator was to visit a patient with the small-pox, and should then proceed immediately upon the same day to vaccinate patients, he would act very improperly; no order has been given upon the subject, because it was conceived they would have the good sense not to act so preposterously.

1926. Is it not very important that regular vaccinators should have an intimate acquaintance with the disease of the small-pox?—Certainly; and of all diseases.

1927. Is it not very probable, that in the course of their practice as vaccinators, they would frequently come in contact with persons labouring under the small-pox?—When they do, I presume a wise man, after doing so, would avoid entering into a house where there were children who had not been vaccinated.

1928. Where the inmates of a house are exposed to the immediate danger of catching the small-pox from a person labouring under that disease in the very same house, is it not necessary that a vaccinator should attend that family for the purpose by vaccination of protecting them against small-pox?—If the vaccinator, upon the disease breaking out, can prevail upon the family to vaccinate the children who have not caught it, that is the wisest thing he could do.

1929. Would it be wise or prudent to lay down a rule that a vaccinator should never enter a house where there is small-pox, for the purpose, by vaccination, of protecting the family against the disease of small-pox?—I think to prohibit a surgeon, whether he is a vaccinator or not, entering into a house where there is small-pox, would be absurd. The care that has been taken by the Board of the National Vaccine Establishment to appoint men of sense and men of knowledge gives reason to expect that they will not act rashly or imprudently. But I should consider it a very improper thing for a surgeon to go into a house where small-pox exists and instantly to vaccinate children in health.

1930. Suppose the case is urgent, from small-pox breaking out in a family, and the vaccinator is called to attend at the earliest period possible for the purpose of protecting the family by vaccination; do you mean that in that case, where the danger is the greatest, and the protection of vaccination is most called for, that the vaccinators should lay down a rule that they would not enter into such a house?—It would be perfect folly to do so.

1931. Then you mean, that the vaccinator, after attending in such a case, should use precautions, by washing himself and such other means as are right and prudent, against carrying the infection about with him; have you any reason to know that such precautions are not used by those gentlemen that attend to the children that come for vaccination at the Small-pox Hospital?—No.

1932. Do you not know, that there is infinitely more danger of the infection being conveyed by persons being constantly in a variolous atmosphere such as that of the Small-pox Hospital, than by persons who merely attend the small-pox casually?—Unquestionably the small-pox, when confluent and bad, is so noxious a disease, that I have perceived, on entering the hall of a large house, the offensive smell from a child with the confluent small-pox that was at the top of the house. There is every reason to believe that wherever that smell is perceived the effluvia from that child's body must reach; therefore, I conceive, that the diffuseness of the small-pox contagion is very great and very dangerous.

1933. Did you ever attend at the room of the Small-pox Hospital where vaccination is carried on, and ascertain whether there is any smell of the kind you speak of?—No, I never did.

1934. Have you examined the situation of the vaccinating room, so as to know the distance at which it is from the small-pox wards?—No. I make no doubt that the medical gentlemen take every precaution they are able to do; but I would not confide in such precautions.

1935. Have you ever known an instance, or heard of an instance, in which the small-pox has been traced to have been communicated by the Small-pox Hospital, by means of children attending to be vaccinated?—No.

1936. Supposing that the Small-pox Hospital had been a greater centre of communication of the small-pox infection in London, do not you believe that some single instance of the effect would have been traced?—No; I think that although the fact must be so, the difficulty of tracing it is so great, that it could hardly have been done; and if it was done it might have been suppressed.

1937. If your supposition is true, do you not think, that out of the numerous cases of children going from the vaccine-room at the Small-pox Hospital home to their families, many cases would be found on investigation in which small-pox has broken out in those families?—What would be discovered if there were a minute investigation, I cannot pretend to say; but as no such investigation takes place, I am not surprised that it should not be known. If there were medical men appointed to inquire of every patient who catches the small-pox, when and where did you get it; and if they took a great deal of pains to investigate it, I think it possible they occasionally might discover the source; but there is no such general inquiry made, and they know nothing about it.

1938. If in 2,000 or 3,000 cases in which children have been vaccinated at the Small-pox Hospital, inquiries were made in those families, and it appeared that in no one instance out of those 2,000 or 3,000 families has the natural small-pox broken out within a limited time subsequent to the return of the child that was vaccinated home to that family, should you not be inclined to doubt the opinion you have formed, that the Small-pox Hospital is the great focus, by means of the children vaccinated, of spreading the small-pox through this town?—The investigation of the cases is never minutely made, and consequently no just conclusion can be drawn; the diffusive nature of variolous contagion is matter of public notoriety in the profession; and how it could possibly happen that such a source of infection should not produce small-pox in this populous city is to me quite incredible.

1939. Supposing that a child in a particular family had been carried to the Small-pox Hospital for the purpose of vaccination, and that other members of the family had also gone with the child, and supposing that within a few days the small-pox had broken out in the family, is not it very likely that the circumstance of those persons having attended with the child at its vaccination would have been stated to the medical man whose attendance is required upon the small-pox patient?—Very possibly.

1940. In that case, do not you think it likely that out of the numerous cases of small-pox which you say have been communicated from the Small-pox Hospital, it would have been traced to that cause by the medical practitioner?—An individual like myself may not come to the knowledge of a fact such as that, although the fact had happened a hundred times, and it is my duty to state only the facts I know.

1941. You have stated that in the early history of the vaccine disease, the countenance given to the Vaccine Board by Government was very important in diffusing vaccination throughout the country; do you think at present, when vaccination is fully understood throughout the country by medical men, and there is little difference of opinion as to vaccination being an important preventive, though not an infallible one, against small-pox, that the countenance to be given by the Government is equally important?—I conceive it to be of the utmost importance, and that it is difficult, even with that, to keep it alive, in consequence of the inconceivable apathy there is in the lower orders upon the subject; the exertions of the National Board are constantly requisite to keep it alive.

1942. However necessary it may have been, when public opinion was less decided in favour of vaccination than it now is, to have a Board composed of high medical officers, do you think that that is necessary now, and that the same object would not be effected by Government appointing a single medical officer as inspector over a proper number of stationary vaccinators. Would not that countenance alone on the part of Government, and the practice of vaccination conducted by an institution so regulated, be sufficient to effect all that the National Vaccine Board now effects?—My impression is, that the Board executes the business with more certainty, more zeal, and with more continued exertion, than probably any individual that could be appointed; and that individual, if he was an injudicious man, would do infinite mischief instead of good. I presume he would be appointed by Government. We all know that the Secretary of State cannot be a judge of medical knowledge; he may appoint a very imprudent man, a very injudicious man, and great mischief might arise. If you have the chiefs of the medical profession, you are more sure of wise, prudent and skilful men.

1943. Are you sure of zeal on the part of those medical men, and on the part of a Board so constituted?—I think there always has been zeal since it has been appointed, and I have an impression that they will always naturally act with zeal for the sake of keeping up their own character; but if an individual is appointed, that

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individual may neglect his duty in the most shameful manner, and the world might never know it.

1944. If a person is appointed during pleasure, which means, that so long as he conducts himself well, he will retain his situation, do you think he is very likely to neglect his duties?—It would depend upon the choice made; but no individual so named would have the confidence of the public and the confidence of the medical profession like the chiefs of the Royal Colleges.

1945. Confidence in what is it that you require?—Confidence in sending forth pure lymph, and in sending forth proper instructions for vaccination. For example, there are persons who from love of singularity, or peculiar fancies, vaccinate and recommend vaccination in very improper modes; that has happened again and again. I venture to say now, that it occurs even at the Small-pox Hospital. The practice there is severe, it may be considered cruel and perfectly improper, according to the opinion of all the illustrious and distinguished men in Great Britain, all over Europe, and all over Asia, where it has been diffused, yet from some peculiar way of thinking, the vaccinator chooses to perform the operation in a severe mode, by making six or eight cuts in the arms, by which the children have their arms covered with blood, and their parents are horrified. Now that danger you must always run, appoint whom you please, if he is a single man. But the Board of the National Establishment discuss all those subjects, and their prudence and their knowledge prevent so gross an error being ever committed.

1946. Do you mean to say that the chiefs of the Board devised the mode, or that it is not the result of the experiments of other persons than themselves?—Their mode of acting in establishing the practice was this, I was appointed director, and as I was well acquainted with the practice, they got me to gather together the instructions for vaccination that had been issued by all the previous establishments. I corresponded with Dr. Jenner respecting his opinion upon the subject, and then I drew up my sketch of the instructions, and the Board, after hearing me, and seeing those instructions, examined the various gentlemen they thought most competent to give them information upon the subject, and the instructions were then founded upon the wisdom of the best and most distinguished vaccinator then to be had This is very different from appointing a single man who acts according to his own fancy; here it was done by deliberate discussion before the first men in the profession.

1947. Do you mean to say, that the Board gave directions for an uniform course of practice in vaccination; that is, that its own stationary vaccinators are directed to perform the operation in one uniform manner?—Yes; they are positively directed to perform the operation according to instructions drawn up and communicated to them.

1948. Do you mean to say, that the stationary vaccinators actually follow those instructions, or that many of them do not follow their own fancy in performing the operation?—If it was known that they deviated from the instructions, the Board would instantly discharge them. I was in the habit, when a director, of visiting the various stations; I saw the gentlemen vaccinate, and I never knew any deviation from the rules laid down.

1949. You have spoken of the confidence in pure lymph; are you not aware that a considerable number of practitioners do not receive their supply of lymph from the Board, but from either the Small-pox Hospital or the London Vaccine Institution?—Certainly I know it.

1950. Does not that show that pure lymph is to be obtained from those stations, and that a large number of medical gentlemen have confidence in the lymph they obtain from those stations?—Certainly.

1951. Would not a repeated supply of inefficacious lymph be likely to correct itself from the complaints that would be made by medical men to the inspector or to the Board?—Certainly; I know nothing of impure or bad lymph being sent.

1952. Is there not such intelligence amongst medical men, that any absurdity in practice, or any impurity in lymph, is sure to be corrected by the observations and animadversions which would be made upon any deficiency of that kind in the management of the Board?—We know that singular, and even bad practice, often leads to notoriety, and a great deal of quackery proceeds from a man proposing something perfectly erroneous, but his peculiarity, and his acting differently from other medical men, strikes a great number of absurd persons as a proof of superior talent; hence it is, that such a man as St. John Long, or any other quack, acquires celebrity from an absurd, wicked and injurious practice. Such was the case with

Dr. Walker,

Dr. Walker, he deviated from the practice he first commenced in order to acquire notoriety.

1953. Do you not think that the inspector over the stationary vaccinators appointed by Government would be likely to be held in check by the danger of his losing his situation if he was to follow any of the vagaries you contemplate; and do you not think, that if he were to indulge in any of those fancies, the good sense of intelligent practitioners would lead them to follow the rational course of practice, in spite of those absurdities?—Certainly; but he might do mischief.

1954. Do you think it necessary he should be subject to some superintendence?—The nature of our Government is not an arbitrary Government; and it is far more congenial to our constitution that an important duty should be controlled by a Board, and not by one man who is empowered to be the supreme governor of the business.

1955. Is not a Board a more expensive mode than a single man?—I find great difficulty in striking the balance, when upon the one side you place a sum of money, and upon the other side the danger of the lives of thousands of persons; the small sum that is given to the Board is so trifling, and the difference between that and what you would give to a superintendent is so inconsiderable, that I should hardly think it would enter into the consideration of any person.

1956. What should you consider a sufficient salary for a person of sufficient character to have the entire management and control of this establishment?—The superintendent surgeon of a vaccine establishment could not do his duty fully under a salary of 400*l.* or 500*l.* a year, and no person in high reputation in London would accept it upon those terms.

1957. Do you consider Mr. Simpson, the present superintendent, a respectable man, and fully equal to the inspection of the present vaccinators?—I do. I consider him a most respectable man, and as far as I know he acts most usefully towards the institution.

1958. Has he not intelligence enough for inspecting such persons?—Mr. Simpson was surgeon-major of one of the regiments of Guards, and he has a large retiring allowance. He had not, I have understood, much general practice, consequently he was extremely glad to accept of a situation that gave him a house and a salary; and by a large half-pay from the Life Guards, he is able to accept the office.

1959. If the person appointed were first to undergo an examination before the College of Physicians as to the proper mode of performing vaccination, and as to his general intelligence as a medical man, do not you think that that would be a sufficient guarantee, added to the other checks against those vagaries in practice which you seem to apprehend?—It is not vagaries in practice simply that I apprehend, but a great deal more; if the business of vaccination were entrusted to one man, instead of a Board, there is danger of neglect and carelessness, as well as of an injudicious mode of practice; but the watchfulness of a Board is of vast utility. There is not a hospital in London in which it is not found by experience to be far better managed by a Board, than by an individual, that is the experience of the whole world. I can conceive the possibility of a gentleman of zeal and knowledge and skill, with every good quality; if you could always appoint such a man you would have no occasion to have a superintendence over him; but you are not likely to meet with such a man, and if he errs, the public will be dreadful sufferers.

1960. In case of the officer neglecting his duties, would not the better conduct observed by the private vaccine institutions be a powerful stimulus to him to manage the business properly, and would not that motive, in addition to the danger of his dismissal by Government in case of his neglecting his duties, afford sufficient checks for securing good conduct?—That is a question for the Committee to decide more than me.

1961. Your opinion respecting the advantages of a Board is founded upon the general opinion, that in the departments of Government the duties are better performed by a Board than by a single responsible officer?—That is one reason, but my opinion of the advantage of a Board was founded upon experience. I belonged to the Board for 15 years, and I was struck with the wisdom, the prudence, and the exertions of the Board during the whole of the period in which I was director; and I never heard a single whisper of disapprobation of their conduct.

1962. After

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1962. After having drawn up those instructions as to the mode of vaccination, and entrusted the inspection of the stationary vaccinators to your subordinate officers, what was it that your Board did?—I usually had a great number of letters, perhaps 30 or 40, coming from all parts of the world, upon the subject of vaccination, to lay before the Board, and answers were to be given to those letters. The Board gave me instructions in general as to the nature of those answers. The reading of those letters, and the considering their contents, generally occupied one or two hours of the Board. The important answers were written by myself, and the less important were written by the registrar. The next business of the Board was the reports from the vaccinating surgeons of what they had done, what they had observed, and what had occurred; and reporting the cases where vaccination was supposed to have failed, and where small-pox or other eruptions were suspected to have occurred. Also cases that were of a doubtful nature, and which required instructions what was to be done relative to those persons.

1963. In the early history of the disease, when the practice was novel, it may be expected that the duties would be more laborious; but at present are not the functions of the Board principally to see that applications for lymph are attended to, and to receive the reports of the inspectors as to the number of persons vaccinated in London, and that the supply of lymph at the several stations is kept up?—It is true, certainly, that the business of the Board is exceedingly less now than it was formerly. Since the establishment has been thoroughly organized the business goes on regularly, like a piece of clock-work. At the commencement of it, I thought that the weight, authority and character of the Board was of infinite use: it is much less requisite now; but still I apprehend that the Board is a much better mode of conducting the business than appointing an individual.

1964. Were you acquainted with some experiments that were made at the commencement of the vaccination at the Small-pox Hospital?—Intimately. At the discovery of vaccination, Dr. Woodville was physician of the Small-pox Hospital. He commenced vaccinating there, and in a short time published a work, his account of the discovery of the symptoms of the vaccine, and his opinions upon the subject. In this work he stated that the vaccine was an eruptive disease, the eruptions being very similar, often, in appearance to small-pox eruptions. He mentioned that the symptoms of this disease were vomitings, purgings, fever and epileptic fits, which carried off one of his patients; and, on the whole, he declared that the symptoms of the vaccine disease were nearly as violent as those of inoculated small-pox.

1965. Do you mean to say that this account was given by Dr. Woodville as his deliberate opinion, after he had had time to investigate the disorder?—I presume he did not publish anything but his deliberate opinion. The work I refer to was intitled, "Observations upon the Cow-pox, by Dr. Woodville, published in July 1800." The first works seem to have been published by combination between Dr. George Pearson and Dr. Woodville together; but on one occasion Dr. Pearson anticipated Dr. Woodville, and he gave, in a periodical Medical Journal, the first account of the cases vaccinated at the Small-pox Hospital. I know that Dr. Woodville afterwards acknowledged his errors; but I do not know that Dr. Woodville ever published in any book this acknowledgment.

1966. Is not the larger work of Dr. Woodville upon that subject considered a work of excellent authority?—I think not; nothing that Dr. Woodville wrote on the vaccine is considered of any authority, but is filled with errors; I know, in point of fact, from Dr. Jenner, that Dr. Woodville lamented exceedingly his indiscretion in printing an account of vaccination previous to his understanding it; but I do not know that Dr. Woodville distinctly stated that in any printed book.

1967. Are you aware that Dr. Woodville, independently of Dr. Jenner, obtained a fresh supply of the disease, which he found in the neighbourhood of London?—Yes; he was a very active man, and he discovered the cow-pox in some cows, I think in Gray's-inn-lane, with which he commenced his experiments; but those experiments were conducted unfortunately at the Small-pox Hospital, and his patients were infected with the two diseases; his patients were infected with small-pox before at the same time, or soon after he had vaccinated with them.

1968. Do you attribute that to the circumstance of the experiments being conducted at the Small-pox Hospital?—Unquestionably; it was charged against him that

that he had mixed the two lymphs; I recollect he denied it, and, as far as I recollect, he said that it was the infectious effluvia of the Small-pox Hospital that had been communicated to them.

1969. Where is that charge and that defence to be found?—I cannot recollect particularly where it is to be found, but I have a general recollection of the facts. The publication of Dr. Woodville caused a violent controversy, which lasted two or three years. Some medical men insisted that the vaccine was an eruptive disease, and some persons declared that it was not; some said that it was attended with violent symptoms, and others with very mild symptoms. All this was produced by the mistake which Dr. Woodville had made in his experiments.

1970. Was not Dr. Woodville supposed to have taken the small-pox pustule for a pock pustule, and to have inoculated his patients with small-pox?—That was supposed to be the case by some persons; others said that there was a hybride disease.

1971. Do you believe in the existence of any such disease?—I never saw it.

1972. Then you believe that that was a vulgar error?—I believe it was a fanciful error. Dr. Woodville, I believe, communicated to several persons, particularly to the Earl of Egremont, who is a benevolent nobleman, and wished to vaccinate the town of Petworth, he got matter from Dr. Woodville, and it turned out to be the small-pox. He also sent matter to the island of Madeira, and the physician there described the vaccine to be an eruptive disease like small-pox; all this arose out of the mistake of Dr. Woodville, which he acknowledged to Dr. Jenner.

1973. Previous to what period did these mistakes take place?—I know that it all occurred in the very commencement of the practice of vaccination.

1974. Did not Dr. Woodville afterwards in his larger work describe the occurrence of the small-pox pustule and the vaccine at the same time on the same arm?—I remember that he did.

1975. Is that a fact which you admit?—I do not know any impossibility in it, I should have thought it improbable, but Dr. Woodville having asserted it, I believe it. He was a man of respectability, and I believe of veracity.

1976. Is not it pretty generally admitted that it is a case that may occur?—Usually the one infection produces an influence upon the other apparently; but which prevails seems to be different in different cases.

1977. Was there not an experiment of this kind, that the two existing upon the same arm within a small distance from each other, the matter taken from small-pox has given genuine small-pox, and the matter taken from the vaccine, has given genuine vaccine disease?—I understand that that has been said, and I think it is probable, but I have not seen the experiment made, yet I see no reason to doubt it.

1978. Is there any general mark of the effect of the performance of vaccination by which you may judge of its being genuine?—I think we could generally, but not invariably judge.

1979. In how many cases per cent. would the mark you refer to be distinguishable, and in how many not?—I cannot pretend to say that I know that; the marks are extremely various in different persons, they are sometimes deep, and sometimes very superficial; they are sometimes indented, and sometimes extremely smooth; the appearances are so various that no absolute certainty can be obtained, but a probability can be always obtained.

1980. If a case occurred in a court of law it which it was important to ascertain whether a person had or had not had the vaccine disorder, and you were put into the witness box, and from an examination of the arm were called upon to state upon oath whether the person had or had not had the vaccine disease, could you, from examining the arm, be enabled to state whether the person had or had not had the disease?—If it means an absolute certainty, in a great number of instances I could not do it; but with a high probability, I could.

1981. Although you could state in a case where there was a mark whether a man had had the disease, with what degree of certainty, if he had no mark, could you say whether he had not had the disease?—If he had not had any mark whatever, I should think that he had not had the disease; but there are marks of different characters, and all the various shades of difference render it a difficult matter to discriminate precisely.

[*A Parliamentary Return was shown to the witness, marked Session* 1826, *No.* 114.]

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1982. Will you look at this statement of the number of persons who are reported in the Small-pox Hospital to have died of small-pox after vaccination; is there any one of those marks that would give you reason to believe that the person had been successfully vaccinated?—From reading this character of the cicatrix, I should have decided that in all human probability not one of those persons had had the vaccine regularly.

1983. What do you find in the description which leads you to believe that the persons had not had the vaccine disease?—In the first place it appears from this report, so far as I understand it, that there was only one mark in each person; it is not cicatrices, but cicatrix, that is mentioned, so that the whole of those persons had but one mark. Now it is an established opinion, well founded, that one mark, even when perfect, does not secure the person in all probability from small-pox in futurity. In the next place, not one of these marks was a true description of the cicatrix of the vaccine.

1984. What is there in the description of the cicatrix which leads you to suppose that it was not the vaccine?—Because it does not resemble the vaccine cicatrix; it is said, "John Richardson, character of cicatrix not perceptible." Now instead of it being not perceptible, it ought to have been distinctly perceptible, and it should have been indented and circular.

1985. Where there is an arm which does not contain a cicatrix distinctly indented, which is not perceptible, and which is not circular, can you, from that want of distinctive marks, undertake to say that the person had not had the vaccine disease?—I do not know that there is anything that can be laid down as an absolute unexceptionable rule; I should judge that it was not so, but I cannot say that it was absolutely impossible.

1986. Can you state what degree of certainty attaches to the guesses that medical men make as to a person having had, or not having had, the vaccine disease, from the indications found upon the arm?—I will state how the impression came upon my own mind: from my office of director it became my duty to visit all cases where small-pox occurred after vaccination. And in the early period I visited a great number of those cases, and examined the arms most particularly, and made minute inquiries relative to the operation, and discovered that almost every case had only one mark, it had only been punctured with a single point. This was reported to the Board; I kept a book of the cases; I said here you see those cases had but one cicatrix. Sometimes the cicatrix appeared to be correct, but there was but one. I said this seems to me to show that one is not secure. That impression was made upon the Board, and they altered their instructions in consequence, directing that four vesicles should be raised in every child, and that two of the vesicles should never be opened. We improved our practice by experience. There was another remarkable fact that was communicated to me from the East upon this subject, which confirmed this opinion, and is the cause of the present practice of the National Vaccine Establishment.

1987. You do not mean to say that a single puncture will not, in many cases, give the constitutional disorder, but that it is a safer practice to make two punctures?—Exactly. I think, in general, one well-formed vescicle not broken, will, in most cases, secure the patient; but cases of failure have occurred where one only was made.

1988. Is there anything in the statement before you approaching to the proof that any one of those patients had been properly vaccinated?—There is no surgeon conversant with the vaccine that would ever have considered that those persons with a cicatrix of that kind were at all secure.

1989. May not something arise from the description not being so full a description of what was actually seen by the person that made the return, but merely a description of what the appearance of the cicatrices themselves conveyed to his own mind when he examined them?—I should imagine that a physician making a report of this matter could never have done it without full consideration; if he has done it carelessly and thoughtlessly, he must be a very careless and thoughtless man. Here is a report solemnly made to his superiors, and he must have considered it amply; and it is most remarkable that he gives here a description of what is a perfect vesicle, that it should be circular, indented and radiated, and so on, and not one of those on the arms of the persons who died are of that description, so that his description and his effects do not correspond.

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1990. Has not he done quite correctly in giving the evidence in those cases such as he finds it, so that medical men upon reading it may judge whether the patient had or had not had the disorder?—Certainly; a medical man of intelligence upon such a description would draw a just conclusion: but I suppose that the Board of the Small-pox Hospital, who were not medical men, and the public throughout London, drew a very different conclusion; and it is in consequence of an important omission; he does not state that not one of those persons were properly vaccinated; and that omission, I think, is so great an error, as that persons reading it would draw a false inference from what may be said to be a true statement.

1991. Does he not, by contrasting what ought to be a perfect cicatrix with what was the actual appearance of the cicatrix in those cases, conduct the mind of the reader to a doubt as to whether those patients had or had not the disorder?—The Members of the Committee can better judge what impression is made upon their own minds than I can do: if it gave that impression, it was correct.

1992. Will you look at the description given of the characteristic mark on William Johnson, and state whether that is a proper mark of successful vaccination?—It is stated that the cicatrix was small, and not indented; now the person who wrote that must know that the man was not secure against the small-pox; the truth is, that if the cicatrix had been perfect, and a single cicatrix, he would not have been secure, but it is marked here as small and imperfect.

1993. You have stated that in many cases a single puncture will produce the constitutional disorder; is not there then reason to infer, if you find the form of the cicatrix perfect, that the patient has really gone through the disorder?—If we find that the cicatrix is perfect, we should then judge that he had all the security that our cicatrix gives; but the impression produced by this return struck horror through all the town, because the public did not draw the inference that has been referred to, but drew this inference, that persons properly vaccinated had died of the small-pox. It is stated also that 147 persons had the small-pox after vaccination, and that 12 of those 147 died; if this had been a correct report, and credited in the full sense, it would have put an end to the whole benefit of the discovery.

Dr. *Clement Hue*, again called in; and further Examined.

Dr. Clement Hue.

1994. YOU were present at the examination which took place in 1825, with regard to some cases of small-pox which occurred after presumed vaccination?—I was.

1995. What was the impression upon your mind, produced by the examination?—That the report conveyed an erroneous idea as to the fatality of supposed small-pox after vaccination, which error was done away by a subsequent explanation of Dr. Gregory, the physician, who had drawn up the report.

1996. Were you of opinion that there was proof that any single individual, who had been properly vaccinated, died of the small-pox?—Not the least.

1997. What was there in the evidence afforded by Dr. Gregory, of those patients having been vaccinated, which led you to think that the parties had not been successful in vaccinating?—A total absence of the characteristic appearance of the cicatrix.

1998. You judged of what the appearance of the cicatrix really was from the description which Dr. Gregory himself gave of it?—I judged from Dr. Gregory's report.

1999. What was there in this description of the cicatrix which led you to believe that the parties had not had vaccination?—There was a want of the regular appearance of the cicatrix, which is the only criterion upon which I can ground anything like a positive opinion of security; in none of these do I recognise anything upon which I could ground an opinion of security.

2000. Do you not think that where the evidence was positive that the party had been vaccinated, it was the duty of the medical officer to report such cases precisely in the way in which he has reported them; giving upon the one side the positive evidence of his having been vaccinated, and upon the other, the grounds of doubt of his having had the disorder?—All that is stated is that they had a persuasion that they had been vaccinated, but what the grounds of the persuasion were are not stated.

2001. Was the impression made upon the Board that which you have stated as the impression made upon your own mind?—I believe it was.

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2002. Your impression is from seeing the description of those cases that the parties had not gone through the constitutional disorder?—I see no grounds to believe that they had.

2003. Is there anything in the mode in which this return is made that would lead you to believe that the parties had been successfully vaccinated?—No.

2004. Then is it not probable that the same impression which was made upon your own mind should have been made upon the minds of other medical men by this report?—The impression made upon my mind was not from this table alone, but from the general tenor and context of the whole report.

Jovis, 9° die Maii, 1833.

HENRY WARBURTON, ESQ., IN THE CHAIR.

Dr. *George Gregory*, again called in; and further Examined.

Dr. *George Gregory.*

9 May 1833.

2005. WILL you state the circumstances, as far as you know them, which attended the mistakes committed by Dr. Woodville from March to August 1799?—The mistakes made by Dr. Woodville originated in his early distrust of vaccination, and in his endeavour to obviate any possible danger to the patients, by inoculating them on the opposite arm; that is to say, he vaccinated them on one arm, and inoculated them on the other; and he was not aware at that time that under such circumstances, in a number of cases, the inoculation would supersede the vaccination. He did not become sensible of that until late in the year 1799.

2006. When you say *inoculated*, do you mean to say that he inoculated the different arms with the different diseases?—I do.

2007. One arm with the vaccine disease, and the other with small-pox?—Yes; within four or five days of each other.

2008. In what work were those first observations published?—In a work which I place before the Committee, "Reports of a Series of Inoculations for the Variolæ Vaccinæ, or Cow-pox," published in June 1799.

2009. You have stated how the mistakes arose; will you state the nature of the mistake?—The mistake was an ignorance of the mutual action of the cow-pox and small-pox, which did not become known till late in that year.

2010. What is the mutual action of the small-pox and cow-pox under those circumstances?—When the small-pox matter is inserted into the arm as early as the fourth or fifth day after vaccination, in a considerable proportion of cases, but not in all, the small-pox takes effect in the system, and the cow-pox produces no effect.

2011. You mean that the small-pox passes through its stages just as if no vaccination had taken place?—Precisely. Dr. Woodville became sensible of those circumstances late in the year 1799; and in July 1800 he published his second work, intitled "Observations on the Cow-pox," in which he used these expressions: "With regard to the comparative mildness of the vaccine and variolous diseases, as produced from inoculation, I have been enabled to give a very different report from that which I published last year." "From the very benign form in which the vaccine pox has of late invariably appeared, it may be considered as a disease perfectly harmless in its effects;" "nor is it unreasonable to conclude, that if the new inoculation were to be universally adopted, the variolous disease in process of time may be wholly extinguished." (pages 29, 30, 31.)

2012. Does he explain his mistake?—He certainly attempts to get over his first statement, by introducing the theory of a variolated atmosphere in the hospital.

2013. But still he acknowledges he was mistaken?—Yes.

2014. Does he draw any general conclusion from all the cases which he mentions?—No, he does not.

2015. In all the cases he has quoted had he introduced both the disorders together?—No; in a certain number of cases he had not. Although I by no means wish to extenuate the errors made on this occasion by Dr. Woodville, I would merely

throw

throw out the following, as some excuse for him. In Dr. Jenner's second publication, dated April 1799 (page 42), Dr. Jenner uses the following words: "In the present early stage of the inquiry, before we know for an absolute certainty how soon the virus of the cow-pox may suffer a change in its specific properties, it would be prudent for those who have been inoculated with it to submit to variolous inoculation." Dr. Woodville's error consisted in submitting them too soon to that operation, viz. on the fifth day.

2016. Are the Committee to understand that no case of small-pox occurred after Dr. Woodville's operation, except where he had purposely inoculated?—No, there was no such result well marked and free from doubt, except where he had inoculated, and employed the matter thence obtained on successive patients.

2017. Will you proceed with your account of Dr. Woodville's experiments?—I beg to state that in the month of August 1800, Dr. Woodville went over to Paris and carried efficient cow-pox matter to Paris, which is proved in the work of Monsieur le Docteur Valentin, Resultats de l'Inoculation de la Vaccine; Nancy et Strasbourg, July 1802 (page 13), where it is stated: "La vaccine, dont on avoit obtenu les premiers succès, s'etant perdue, le Dr. Woodville vint exprès de Londres en France, dans le mois de Thermidor suivant, et apporta du vaccin: deux enfans, qu'il avait inoculés à son débarquement à Boulogne-sur-Mer, devinrent le foyer primitif de toute la matière dont on s'est servi jusqu'à ce jour."

2018. Were there any other publications of Dr. Woodville on the subject of the vaccine disorder?—No other.

2019. How long after that period did Dr. Woodville continue physician to the Small-pox Hospital?—Until his death.

2020. When did that take place?—In 1805.

2021. Did vaccination continue to be successfully practised there from the year 1800 down to the period of his death?—Yes, it did.

2022. Was inoculation for the small-pox superseded at the Small-pox Hospital before his death?—No, it continued partially during his life-time.

2023. Did Dr. Woodville assist in forming the Broad-street Institution?—He did. On December the 10th, 1799, Dr. Woodville appears as contributing to form the Broad-street Institution; the evidence of it is "Dr. Baron's Life of Jenner," (page 361).

2024. Did this publication in 1799, of Dr. Woodville, give rise to any disagreement or difference between Dr. Jenner and Dr. Woodville?—It did.

2025. Was Dr. Woodville afterwards reconciled to Dr. Jenner?—He was, in the month of June 1803, through the intervention of Dr. Valentin, Dr. Lettsom and Dr. Saunders. (See Baron's "Life of Jenner," page 586).

2026. You have heard stated the idea by Mr. Moore, that small-pox is kept up in London, in his opinion, by the children who are vaccinated at the Small-pox Hospital, and who carry away with them the infection of small-pox, which they communicate to the persons in the family to which they return, or to other persons?—I have.

2027. Do you believe that to be the case?—I feel perfectly satisfied that that statement is incorrect, and wholly unfounded.

2028. What do you believe to be the principal foci of the contagion of small-pox in London?—The records and registers of the Small-pox Hospital clearly prove that the principal foci of the contagion of small-pox are sailors, ostlers and servants at inns, and vagrants from the country. For instance, between the 1st of January and the 21st of March 1832, there were received into the Small-pox Hospital 21 sailors from the neighbourhood of Wapping, 13 persons resident in the immediate neighbourhood of Wapping, from Aldgate and the Minories, and one policeman from that station, making a proportion from that district alone of 35 out of 64, the total admitted within that period; and I would further add, that in consequence of the distance of Wapping from the Small-pox Hospital, we scarcely vaccinate any children coming from that quarter of the town.

2029. Does any considerable proportion of the patients consist of foreign sailors?—A very considerable number; but the largest proportion certainly are the sailors belonging to the colliers, who bring the disease from Newcastle and Shields, where small-pox is almost always to be found.

2030. Could you establish by the registers of the Small-pox Hospital the fact of the number of collier sailors?—I could certainly select the collier sailors from the others.

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2031. But you speak of it as a fact that is thoroughly confirmed by the cases that have occurred in the Small-pox Hospital?—Certainly.

2032. Can you make an extract from the registers of the Hospital, so as to say in a certain number of years how many have been collier sailors?—I find on referring to the register that the name of the ship to which the seaman belongs is not always entered, so that I can only speak as to the general impression left upon my mind by the experience of many years. If I might be allowed to refer to a statement made by Mr. Greenhow, a surgeon of North Shields, it will be seen how very frequent the small-pox is in that neighbourhood.

2033. State what publication you quote from, and the substance of his observations?—The London Medical Gazette of February 7, 1833 (page 589). The statement is to this effect: "Twelve or fifteen years ago cases were occasionally met with of small-pox after vaccination, but comparatively rarely; but since that period it has every succeeding year become more frequent, and in this district at least (North Shields) it has for some time past and does still prevail to a considerable extent, it being no unusual circumstance to find five or six individuals of the same family successively attacked by that disease."

2034. What were the circumstances that gave rise to the evidence that you gave on the 24th of January 1826, to Sir Henry Halford; were you desired on that occasion to give any explanation of the returns which you had made to the directors of the Small-pox Hospital?—On that occasion I was merely requested to answer six questions. No explanations were desired of me, nor was any opportunity offered me of making such explanations, or of examining at home and at leisure the answers which I had given.

2035. You were not allowed to correct any verbal inaccuracy in your answers?—I was not.

2036. Is there any verbal correction that you would have made, if an opportunity had been given you on that occasion to have corrected your *vivâ voce* evidence?—Certainly; one in particular.

2037. Point that out?—In answer to the third question, contained in Paper 114 of the session of 1826, my reply runs thus: "With regard to all the rest of the 12, except William Johnson, the characteristic mark was wanting. By referring to the preceding Table it appears that the cicatrix in this case was small, *not* indented." I read it "small, *but* indented," which makes all the difference. I should have corrected that, if I had had the opportunity; as it stands now it appears contradictory.

2038. Did you ever desire to correct that; did you ever make application for that purpose?—It was impossible I should, for the answers were never sent to me to compare them.

2039. Had you no opportunity to see the report?—I did not see Sir Henry Halford's report till after it was printed.

2040. After considering the returns that you made on that occasion to the heads of the Small-pox Hospital, and the explanations that accompanied them, do you continue of opinion that the manner in which you stated the facts relating to cases of small-pox, after real or supposed vaccination, was altogether fair and proper?—On reflection and the most careful deliberation, I am persuaded that I could not have put the facts in a fairer way before the governors of the Hospital; and I see nothing now, at the distance of seven years, which I would wish altered in that report, either in form or in substance.

2041. Were the omissions that you heard Mr. Moore complain of, such as, from the nature of things, could not be supplied?—I conceive that they could not be supplied; that there was a moral impossibility of supplying them.

2042. What are those omissions?—The early history of the vaccine process in the several cases reported on, amounting in number to 147.

2043. Have the statements made in that report been borne out by the subsequent experience which you have had at the Small-pox Hospital?—The statements there made are borne out in every respect, both with regard to the mild and the proportion of severe cases, by the experience of the Hospital for the last seven years. I have here a return of the number of cases received into the Small-pox Hospital, having small-pox subsequent to reputed vaccination, for seven years ending December 31, 1832; showing the mortality among such cases; the proportion which they bear

bear to the total admissions; and what proportion of such cases had been originally vaccinated at the Small-pox Hospital. It is as follows:

YEARS.	Total Number treated at the Hospital.		Numbers having the Small-pox after Vaccination*.		Proportion of such cases Vaccinated at the Small-pox Hospital.		REMARKS.
	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	
1826 -	168	52	63	4	1	–	
1827 -	305	85	105	1	1	–	
1828 -	202	67	71	3	–	–	
1829 -	328	103	109	7	4	–	
1830 -	259	76	84	7	5	–	
1831 -	193	53	66	6	5	–	The first recorded case of death by small-pox after vaccination duly performed at the Small-pox Hospital.
1832 -	330	98	121	12	4	1	
Total in 7 Years	1,785	534	619	40†	20	1	

* The interval fluctuated between 7 and 30 years; average interval 18 years.

† 30 deaths by small-pox simply.
10 by other diseases complicated with small-pox.

40

2044. Does the experience of the epidemic small-pox in other countries tend to confirm the statements that you have made with regard to the cases of small-pox after vaccination at the Small-pox Hospital?—Yes, it does, so far as I am acquainted with it; and I beg to lay before the Committee, in proof of this, the very valuable report published by Dr. James Forbes, inspector-general of army hospitals, and superintendent-general of the vaccine establishment in Ceylon.

2045. What is the work you quote from?—I quote from the London Medical Gazette, vol. 10, 1832 (p. 18).

2046. Will you state the substance of that report by Dr. Forbes?—The report is of the epidemic small-pox which ravaged Ceylon in 1830. The proportion of the severe and mild cases, both after vaccination and when unprotected, is precisely the same as that of the experience of the Small-pox Hospital. I have drawn up a return of the comparative mortality occasioned by the small-pox, in the Ceylon epidemic of 1830, in the Small-pox Hospital of London from the year 1825 to 1832, and in the Swedish epidemic of 1824; showing the rate per cent. at which small-pox proves fatal when it occurs at long intervals after reputed vaccination, in large communities, where great difficulties exist in tracing the histories of the original vaccination; which is as follows:

—	Total Number of Cases of Small-pox.	Total Deaths by Small-pox.	Total Cases of Small-pox after reported Vaccination leaving Scars, perfect & imperfect.	Deaths among the Cases of Small-pox after such Vaccination.	Rate per cent. of such Mortality.
Ceylon epidemic of 1830 - - -	414	94	196	16	8 per cent.
Small-pox Hospital in 1825 - - -	419	120	147	12	8 per cent.
Ditto during the seven years from 1826 to 1832 - - -	1,785	534	619	40	7 per cent.
Swedish epidemic of 1824 - - -	not stated.	560	not stated.	34	—

2047. What

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2047. What work is your authority for the epidemic in Sweden?—Monsieur Magendie's "Journal de Physiologie," published in 1826 (p. 129.)

2048. Has the summary of that part of the history of the Swedish epidemic which bears upon the subject now in consideration been given in the return you have now handed in?—It has.

2049. Was the report that you made in 1825 translated into any foreign language and commented upon?—It was translated into French.

2050. In what work?—In Monsieur Magendie's Journal de Physiologie of the same year, 1826.

2051. Are there any observations made upon it?—The introductory observations state, that "hitherto no French journal has published the result of the observations of foreigners upon the preservative effects of the vaccine; and we have thought that the authenticity of the details contained in Dr. Gregory's Report, and his well-acknowledged experience, were motives sufficient to determine us to publish here what is nearly a literal translation of the English memoir."

2052. Did the publication of your report in France produce any unfavourable impression on the minds of medical men in France, as to the imperfect protection given against small-pox by vaccination?—None whatever, so far as I have ever been able to learn.

2053. Occurrences of the same kind as you gave an account of in 1825, are still yearly going on at the Small-pox Hospital?—They are still going on.

2054. Have you ever requested any of the officers of the National Vaccine Establishment to visit the Small-pox Hospital, to judge of the fairness with which you note and report the facts that come under your observation?—I have frequently requested Mr. Simpson's attendance at the Small-pox Hospital; and I have desired that any officers of the National Vaccine Establishment should have every facility afforded them to examine our cases.

2055. Has the experience of the Small-pox Hospital been confirmed by the observation of any similar occurrences in England?—I have just mentioned to the Committee Mr. Greenhow's letter from North Shields, dated January 22d, 1833, which proves that similar occurrences are now attracting attention in the north of England.

2056. What publication do you quote from?—The London Medical Gazette for February 2d, 1833 (p. 590). Mr. Greenhow's words are: "Not only is the small-pox after vaccination becoming much more frequent, but it is becoming also much more virulent. It is true that in the greater number of cases the disease is modified, often turning on the fifth and sixth day; but cases are by no means rare where the disease is confluent, and runs its full course unmitigated by the previous vaccination, and death occasionally ensues."

2057. Is there any other explanation which you wish to give?—I would merely state, that the very same allusion to cases proving fatal after vaccination, which was so much objected to in my report to the governors of the Small-pox Hospital for 1825, is given in the reports of the National Vaccine Establishment for 1818 and 1819, and nearly in the words that I myself have used.

2058. In the reports made to Parliament?—Yes.

2059. Will you read the words that you refer to?—In 1818: "Five cases have been reported to the Board of vaccinated persons who have subsequently died of small-pox. No detail respecting the vaccination could be obtained, and they were all vaccinated at a period of time when the mode of vaccination and the management of the vesicle were not well understood." In 1819: "The testimonies of some of our correspondents are by no means so favourable, and concur in showing that great numbers of persons who have been vaccinated have been subsequently seized with a disease presenting all the essential characters of small-pox. In several of those cases the malady has been prolonged to its ordinary period, and in eight reported cases it has proved fatal."

2060. Does anything contained in those various reports, or does your experience at the Small-pox Hospital, lead you in any degree to undervalue the practice of vaccination as a most important preservative against small-pox?—In no degree whatever; but I would beg to add, that it appears to me that an undisguised statement of the fact that careless and imperfect vaccination is followed by fatal results, is calculated not to discourage vaccination, but to improve the practice of it.

2061. Do you consider vaccination and its effects to be a matter relating purely to surgery?—Certainly not.

2062. Do you consider that it relates more to medicine than to surgery, or the reverse?—I consider it fairly on the confines of medicine and surgery.

2063. So that you think that it should not be left exclusively to the management of surgeons?—I should say, that the assistance of physicians was certainly desirable, because small-pox, against which the vaccination is to be a preventive, is exclusively under the cognizance of physicians.

2064. Are you acquainted with the present state of things in France with regard to vaccination?—No, I am not.

2065. You stated, in reference to Dr. Woodville, that no case of small-pox occurred after vaccination, except where inoculation had been performed with vaccination?—Except in those cases, and others inoculated from them.

2066. How came he then to introduce the theory of variolous atmosphere?—To account for those cases in which eruptions occurred.

2067. Was not the circumstance you mentioned sufficient to account for it?—I believe it was; but Dr. Woodville had a theory of his own, and would not acknowledge what Dr. Jenner believed, and what I believe, to be the truth.

2068. Will you be so good as to read the passage in which he does introduce this theory?—I will. In page 20 of "Woodville's Observations on the Cow-pox," there is the following passage: "Now as these different effects of the disease between the patients in and those out of the hospital did not depend upon any difference or alteration of the matter with which the inoculations were performed, the only cause remaining to which the frequent occurrence of pustules can be rationally referred, is the variolated atmosphere of the hospital, which those patients were obliged to inspire during the progress of the cow-pox infection."

2069. You think that is an unsound view of the subject?—I say an unsound view, and I could give a strong reason for such an opinion.

2070. Will you give your reason?—My reason is, that two children have, within these two years, been *born* in the Small-pox Hospital; the children of Mr. Wheeler, the resident surgeon. Both of those children have been most successfully vaccinated on the third or fourth day after birth; showing that the atmosphere of the hospital could not be variolated, or loaded with small-pox contagion.

2071. Of the 619 who are stated in the report you have delivered in to have had small-pox after vaccination, are you prepared to affirm positively that any of those bore the characteristic mark, as it is here described?—Vast numbers of them.

2072. Of the 40 who died, were there any who bore it?—Yes, there were.

2073. You are quite certain that there were some of those 40?—Yes.

2074. How many?—There was certainly not so large a proportion of fatal cases having perfect scars as of mild cases. There were some fatal cases that bore good scars; but there were also many mild ones that bore very imperfect scars.

2075. Have you any record of the numbers out of those 40 who had marks?—Yes, I have.

2076. What is the number?—I could state it to the Committee, if it was thought desirable, by referring to the hospital register.—Having referred to it, I find that 17 out of the 40 are noted as having *good scars*; but it should be remembered that several of these died of erysipelas, or laboured under some other disease co-existing with the small-pox.

2077. Out of the 619, were there any who had in the first instance been vaccinated at your establishment?—Yes.

2078. How many?—Twenty.

2079. Had any of the 40 who died been vaccinated there?—Yes, one.

2080. Had any of the 619 been vaccinated at the National Vaccine Establishment?—That I am not able to say.

2081. Nor with regard to the 40?—No; I do not know what the stations of the National Vaccine Establishment were formerly, nor do I know where they are even at present.

2082. You are not aware whether any of that number had been vaccinated at the National Vaccine Establishment?—I never inquired into that; I was satisfied with the fact that they had been vaccinated in London.

2083. You stated that you found no great difficulty in procuring the attendance of persons who have been vaccinated at the Small-pox Hospital?—None.

2084. No case therefore of mixed disease, or in fact of small-pox, occurring along with vaccination, could have taken place without coming to your knowledge?—It could not have taken place without coming to my knowledge.

Dr. *George Gregory.*

9 May 1833.

2085. Do you admit the fact of a hybrid disease, or merely of the same patient having the two diseases at the same time?—There is no such thing as a hybrid disease; but cow-pox and small-pox may, and frequently do, co-exist in the same person.

2086. Did not small-pox occur from matter sent from the Small-pox Hospital, in some instances?—It did.

2087. Did you ever make a correction of the error in your evidence before the Board in 1826?—I stated, in the London Medical and Physical Journal for May 1826 (page 437), "that my answers to Sir Henry Halford's questions were not considered by myself as refuting in any degree any of the statements made in my report, but merely as expressing in other words my opinions upon the subject of imperfect vaccination."

2088. Did you make any allusion to the error upon the subject of the cicatrix in the case of William Johnson?—No, I did not; I did not consider it of sufficient importance.

[*A Letter from Robert Keate, Esq., to the Chairman, was delivered in and read, as follows:*]

"MY conversation with Mr. Phillipps, last year, was in consequence of my having been officially deputed by the Council of the College of Surgeons to convey to the Secretary of State an expression of their regret, that in the constitution of a Board to preside over a practice which they deemed to be purely surgical, the Government had left one surgeon only, with four physicians, namely, two as members of the Board, one as registrar, and one as treasurer; and I was directed to add, that the Council felt this the more, because in the event which had been contemplated of discontinuing the National Vaccine Board, the College of Surgeons had considered it of so much importance to the interests of humanity, and to the credit of the country where the discovery had been made, that they had entertained the question of offering their gratuitous services for carrying on so desirable a national object, if the Government would continue to pay the stationary vaccinators."

APPENDIX.

LIST.

(A.)

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(C.)

LONDON VACCINE INSTITUTION AND ROYAL JENNERIAN SOCIETY.

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(D.)

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APPENDIX.

Appendix (A.)

NATIONAL VACCINE BOARD.

— No. 1. —

RETURN of the NUMBER of PERSONS VACCINATED at each Station, from the Year 1828 to 1832.

NAMES.	1828.	1829.	1830.	1831.	1832.	TOTAL.
J. C. Carpue, P. V.	1,166	1,222	1,393	1,084	1,545	6,410
F. Agar	395	539	440	579	615	2,568
C. R. Aiken	366	424	341	503	592	2,226
J. Barnett	290	255	215	319	346	1,425
J. A. Gillham	2,822	4,096	3,454	3,229	3,761	17,362
J. Harkness	538	598	613	683	756	3,188
E. Leese	1,047	1,176	1,458	1,464	2,254	7,399
J. Lewis	734	693	458	500	624	3,009
					Robertson.	
J. Marshall	634	748	880	859	1,376	4,497
J. Ring	288	- - -	- - -	- - -	- - -	288
S. Sawrey	390	550	253	- - -	- - -	1,193
R. Semple	187	- - -	325	284	552	1,348
H. Sterry	354	356	417	385	451	1,963
N. B. Ward	875	1,445	928	1,437	1,318	6,003
J. Peregrine	77	- - -	- - -	- - -	- - -	77
Grand Total	10,163	12,102	11,175	11,326	14,190	58,956

J. T. Simpson,
Inspector of Vaccinators.

— No. 2. —

RETURN of the NUMBER of CHARGES of LYMPH supplied, and NUMBER of APPLICANTS, from the Year 1828 to 1832.

NAMES.	1828.	1829.	1830.	1831.	1832.	TOTAL.
J. C. Carpue, P. V.	20,534	24,048	22,041	23,191	28,368	118,182
F. Agar	3,705	3,856	3,527	4,088	4,021	19,197
C. R. Aiken	1,439	1,456	1,640	2,328	2,379	9,242
J. Barnett	3,166	1,564	2,597	5,333	5,422	18,082
J. A. Gillham	21,100	25,403	23,103	18,248	22,883	110,733
J. Harkness	1,159	1,075	1,137	4,017	3,441	10,829
E. Leese	2,852	3,732	4,611	5,723	5,252	22,170
J. Lewis	16,466	17,915	14,667	2,560	11,508	63,116
					Robertson.	
J. Marshall	11,861	12,604	7,429	5,401	6,950	44,245
J. Ring	2,592	- -	- -	- -	- -	2,592
S. Sawrey	7,106	5,268	3,969	- -	- -	16,343
R. Semple	995	- -	- -	2,510	5,985	12,395
H. Sterry	2,285	1,824	1,158	1,491	1,387	8,145
N. B. Ward	2,323	1,620	1,897	3,587	2,917	12,344
J. Peregrine	790	- -	- -	- -	- -	790
Grand Total	98,373	100,365	90,681	78,477	100,513	468,405

Number of Applicants.

Years.	Number.
1828	5,748
1829	6,269
1830	6,972
1831	6,760
1832	6,852
Total	32,601

J. T. Simpson,
Inspector of Vaccinators.

—No. 3.—

RETURN of the Number of Persons Vaccinated (as far as can be ascertained) by Applicants supplied with Lymph.

YEARS.	——
1828 - - - - - -	63,435
1829 - - - - - -	52,222
1830 - - - - - -	77,868
1831 - - - - - -	47,813
1832 - - - - - -	49,000
Total - - -	290,338

J. T. Simpson,
Inspector of Vaccinators.

—No. 4.—

RETURN of the Applications made to the Board for the Supply of Lymph by Public Departments in this Country during the following Years:

YEARS.	NAVY.	ARMY.
1828 - - - - - -	43	80
1829 - - - - - -	47	58
1830 - - - - - -	56	60
1831 - - - - - -	38	61
1832 - - - - - -	37	44
Total -	221	303

J. T. Simpson,
Inspector of Vaccinators.

—No. 5.—

RETURN of Supplies of Lymph to Public Officers of British Colonies, Dependencies, and to Foreign Governments.

1828 - - - - - - - 11; viz.

Vice Consul (Rio de Janeiro), 2d January.
Inspector of Hospitals (Barbadoes), 29th February.
Comptroller of Customs (Nova Scotia), 25th March.
Royal Ordnance Hospital, to send to Quebec, 25th April.
British Consulate Office (Bergen), 12th June.
Principal Medical Officer (Sierra Leone), 14th July.
British Consulate Office (Brest), 25th July.
Principal Medical Officer (Barbadoes), 20th August.
2d Rifles (Malta), 24th September.
27th Regiment (Granada), 17th October.
Principal Medical Officer (Barbadoes), 5th November.

1829 - - - - - - - 9; viz.

Dr. Davy, Principal Medical Officer (Malta), 25th March.
K. G. Kollig, Royal Physician to the Circle of Glewitz (High Silesia), 30th March.
Count Mandelhof, to send to Stutgard, 7th April.
Staff Surgeon (Nova Scotia), 20th May.
Viscount D'Asseca, Portuguese Minister, to send to Lisbon, 23d June.
Sir E. Perry, to take to New South Wales, 1st July.
Dr. Baxter, Inspector of Hospitals (Barbadoes), 9th July.
Principal Medical Officer (Malta), 1st December.
General Stewart, Governor of St. Lucia, 16th December.

1830 - - - - - - - 11; viz.

Victualling Department (Jamaica), 16th January.
Ordnance Department (Halifax), 30th January.
Principal Medical Officer (Halifax), 17th March.
Health Officer (Cape Breton), 2d June.
Sir E. Perry, R. N. (New South Wales), 6th July.
Principal Medical Officer (Dominica), 4th August.
Dr. Davy, Physician to the Forces (Malta, two parcels), 6th September.
Principal Medical Officer (Honduras), 25th September.
Mr. Colquhon, agent for Dominica, 14th December.
Mr. Colquhon, agent for Nevis, 16th December.
Dr. Davy, Principal Medical Officer (Malta), 20th December.

1831 - - - - - - - 12; viz.

Principal Medical Officer (Barbadoes), 2d March.
Principal Medical Officer (Dominica), 2d March.
Principal Medical Officer (Barbadoes), 6th April.
A. Baxter, Inspector-general of Hospitals (Barbadoes), 4th May.
Dr. G. Weir, Inspector of Hospitals (Jamaica), 19th May.
Prince Talleyrand, to send to France, 25th May.
Prince Esterhazy, to send to Vienna, 19th August.
H. M. S. Dryad, coast of Africa, 29th September.
Captain Wright, Superintendant of Moortown (Jamaica), 6th October.
Principal Army Medical Officer (Jamaica), 3d November.
Royal Ordnance Hospital, to send to Gibraltar, 31st December.
C. Darrell, Inspector-general of Hospitals (Gibraltar), 31st December.

1832 - - - - - - - 6; viz.

J. Wilson, 2d West India Regiment, Belize (Honduras), 8th March.
Royal Ordnance Office, to send to Barbadoes, 14th March.
Royal Ordnance Office, to send to Halifax and Nova Scotia, 4th April.
Principal Medical Officer (Halifax), 25th April.
Garrison of the Island of Ascension, 1st June.
Dr. Allen, Principal Medical Officer (Halifax), 20th June.

J. T. Simpson,

Inspector of Vaccinators.

— No. 6. —

SUMMARY of REPORTS from the VACCINATORS of the NATIONAL VACCINE ESTABLISHMENT of the Number of Cases Vaccinated at their several Stations; of the Cases of Small-pox which have occurred after Vaccination had been performed; of the Cases of Small-pox modified after Vaccination; and of the Cases of fatal Small-pox after Vaccination, from the Year 1825 to the Year 1832, inclusive.

	Numbers Vaccinated.	SMALL-POX AFTER VACCINATION.	MODIFIED SMALL-POX.	FATAL CASES.
Carpue - - -	9,419			
Agar - - -	3,750	- - - - - -		
Aikin - - -	3,325	- - - - - -	several, but very mild.	
Barnet - - -	1,960	- - - - - -	four cases.	
Gillham - - -	25,513	- - few cases, as likewise of measles, hooping-cough, and other diseases of children, from exposure to contagion previous to vaccination.		
Harkness - - -	4,049	- - - - - -	six or seven cases -	1.
Leese - - -	10,322	one case severely - - -	several at various times	1 *.
Lewis - - -	6,202	- - - - - -	six on an average yearly.	
Marshall, and afterwards Robertson -	5,543	- - four cases, (Marshall) which appeared the 3d or 4th day after vaccination; one case, (Robertson) which appeared the 2d day after vaccination; all therefore from previous infection.		
Semple - - -	1,609	- - ten cases, in which small-pox appeared on the 3d, 4th, and 5th days after vaccination, all in consequence of prior exposure to contagion, and most of them in the same house or family where small-pox pre-existed.		
Sterry - - -	2,871	- - - - - -	about 20 cases.	
Ward - - -	9,083	- - - - - -	six.	
TOTAL - - -	83,646	- - - - - -	- - -	2.

* This case is of a very doubtful nature; but from an anxious wish not to withhold any circumstance which might be supposed to bear upon the point in question, it has been introduced into the Report. The patient, Sophia Wallis, was vaccinated May 10, 1829, but was not in attendance afterwards for inspection; the mother reported that one spot arose in one arm, and that it attained its utmost height on the *third* day. In January 1831 this child died with low fever and an eruption of pustules. It was the opinion of a medical practitioner who visited this case, that low fever, with the deprivation of adequate nourishment and want of domestic attention, were the causes of death.

— No. 7. —

EXPENDITURE of the NATIONAL VACCINE ESTABLISHMENT for the Year 1832.

	£.	s.	d.	£.	s.	d.
*Officers of the Board - - - - - - -	500	–	–			
Registrar - - - - - - - - -	200	–	–			
Inspector - - - - - - - - -	200	–	–			
Secretary - - - - - - - - -	50	–	–			
Treasurer - - - - - - - - -	25	–	–			
†Messenger - - - - - - - - -	55	–	–			
				1,030	–	–

* The Physicians are elected at Michaelmas, and the Surgeons in July, consequently they are paid their salaries after the audit. In the next year the officers of the Board will be only 300 *l.*

† Paid weekly, which accounts for the excess of 3*l.* on the last year.

	£.	s.	d.	£.	s.	d.
Stationery	13	2	5			
Vaccinators	900	–	–			
Rent to Mr. Lewis	10	–	–			
				923	2	5
Rent	130	–	–			
Taxes	70	16	11			
Repairs	3	13	–			
				204	9	11
Brettell, printer	33	10	–			
Finny, coal merchant	21	–	–			
Mitchell, glassman	12	–	–			
Thompson, cutler	70	–	–			
Disbursement by Inspector for postage of letters, &c. &c.	27	7	7			
				163	17	7
			£.	2,321	9	11

The first term of the lease of the house of the Establishment will expire at Lady-day 1834.

N. B.—The salaries of Officers of the Board and Treasurer become due at Michaelmas, 325 *l.*

Clement Hue, Registrar.

Appendix (B).

HOSPITAL AT KING'S CROSS.

— No. 1. —

RETURN of the NUMBER of PERSONS VACCINATED by the SMALL-POX HOSPITAL.

YEARS.	Numbers Vaccinated.
From 21 Jan. 1799 to 1 Jan. 1809	19,741
In 1809	1,515
1810	1,720
1811	1,458
1812	1,939
1813	1,831
1814	1,671
1815	2,440
1816	2,313
1817	3,124
1818	2,161
1819	3,328
1820	2,422
1821	2,842
1822	3,368
1823	3,129
1824	3,324
1825	4,003
1826	3,016
1827	3,702
1828	3,217
1829	3,481
1830	3,473
1831	3,062
1832	3,701
Total in 34 Years	85,981

N. B.—Vaccination was performed during these years at the Central Station only.

G. Gregory, M. D.

— No. 2. —

RETURN of the NUMBER of APPLICANTS for VACCINE LYMPH at the SMALL-POX and VACCINATION HOSPITAL during each of the Five last Years.

YEARS.	Applicants in London.	Applicants from Country.	Applications from Foreign Stations.	TOTAL.
1828 - -	No registers kept during these years. Estimated annual average of applicants supplied with lymph - - -			600
1829 - -				
1830 - -				
1831 - -	732	307	11	1,050
1832 - -	1,031	401	11	1,443
1st Quarter of 1833 -	247	93	1	341

N. B.—No account has been kept of the number of charges of lymph issued to each applicant, and no means exist of ascertaining the number of persons vaccinated by such applicants.

G. Gregory, M.D.
W. L. Wheeler, Resident Surgeon.
James Clift, Secretary.

— No. 3. —

RETURN of the APPLICATIONS made at the HOSPITAL for the Supply of LYMPH, on the part of the Public Officers of any British Colony or Dependency, or Foreign Government, during the said period of Five Years.

1828, 1829, 1830 — No registers kept.
1831, 1832 — No applications made by any public officer of such foreign station or Government.

The following is a RETURN of APPLICATIONS made by Private Individuals for the Supply of LYMPH for Foreign Stations:

YEAR.	FOREIGN STATION SUPPLIED.	BY WHOSE HANDS.
1831 - -	Hungary - - - - -	Agent of Prince Esterhazy.
—	Memel - - - - -	—
—	New South Wales and Madagascar	Mr. David Turner.
—	Munich - - - - -	Dr. Bernard Roeser.
—	Ratisbon - - - - -	Dr. Carl Hewich.
—	Dresden - - - - -	Mr. Stampf.
—	Italy - - - - - -	Mr. Barklimore.
—	Jamaica - - - - -	Dr. M'Murchison and Dr. Weir.
1832 - -	Terceira - - - - -	Mr. Osorio.
—	Oporto - - - - -	Gabriel Ferrari, Esq.
—	Trieste - - - - -	Mr. Molini.
—	Newfoundland - - - -	Mr. Clinch.
—	Germany - - - - -	Mr. L'Estrange.
—	The Netherlands - - - -	Mr. Gilman.
—	West Indies - - - -	Mr. Chevalier.
—	Spain - - - - - -	Dr. Negri.
—	Jamaica - - - - -	—
—	Guernsey - - - - -	Mr. De Lisle.

G. Gregory, M.D.

— No. 4. —

RETURN of Applications made to the Hospital for the Supply of Vaccine Lymph by any Public Department in this Country, during the same period of Five Years.

The Royal Horse Guards and the two regiments of Life Guards have, on several occasions, been supplied with lymph, at the request of their respective surgeons, (Dr. Hair, M. L. Este, Esq., and S. D. Broughton, Esq.)

The following is a Return of the several Hospitals, Charities and Parochial Infirmaries supplied with Lymph, on the Application of their respective Medical Officers, during the Two last Years.

YEAR.	Hospitals and Charities Supplied with Vaccine Lymph.
1831 - -	Infirmary of the Parish of St. James's, Westminster.
—	London Fever Hospital.
—	St. Bartholomew's Hospital.
—	St. Giles's Parochial Infirmary (frequently).
—	Islington Dispensary.
—	Infant School of St. Mary-le-Strand.
—	Royal Marine Infirmary, Woolwich,
—	St. George's Hospital.
—	Stoke-Newington Dispensary.
—	Finsbury Dispensary.
—	Suffolk Lunatic Asylum.
1832 - -	St. Pancras' Infirmary (frequently).
—	Finsbury Dispensary.
—	Northern Dispensary.
—	Parochial Infirmary of Andover.
—	City Dispensary.
—	St. Giles's Infirmary (frequently).
—	Stoke-Newington Dispensary.

G. Gregory, M.D

— No. 5. —

AN Account of the Expenditure of the Small-Pox Hospital, in support of Vaccination, during each Year of the said period.

The expenditure of the Small-pox Hospital in support of its Vaccination department is included in the general Return of Expenditure, of which an account is annexed. The incidental charges for the Vaccination department (such as lancets, glasses and points, and books of register) are very small, and may be estimated at an annual average of ten pounds (£. 10.)

EXPENDITURE of the Small-Pox and Vaccination Hospital, for Five Years, ending 31 December 1832.

YEAR.	Ordinary Expenditure.	Extraordinsry Expenditure.	TOTAL.
	£. s. d.	£. s. d.	£. s. d.
1828 - - -	1,019 2 10	*916 13 10	1,935 16 8
1829 - - -	1,082 13 2	- - - -	1,082 13 2
1830 - - -	1,054 16 4	- - - -	1,054 16 4
1831 - - -	1,085 8 8	- - - -	1,085 8 8
1832 - - -	1,159 19 9	- - - -	1,159 19 9

* For repairs of the building.

G. Gregory, M.D.

— No. 6. —

AN ACCOUNT of the REVENUE of the SMALL-POX HOSPITAL applicable to VACCINATION, stating whether such Revenue was raised by Public Subscription or otherwise.

No monies have been received by the Hospital for the exclusive support or encouragement of its Vaccination department.

The following is a RETURN of the DONATIONS, by Persons Vaccinated at the Hospital, for the support of the Establishment generally.

YEAR.	Amount of Gifts at Vaccination.
	£. s. d.
1828 - - - -	24 - 6
1829 - - - -	16 14 1
1830 - - - -	9 7 6
1831 - - - -	22 17 9
1832 - - - -	20 17 5
Total in Five Years £	93 17 3

G. Gregory, M.D.

— Supplement to No. 6. —

A RETURN, showing the INCOME of the SMALL-POX HOSPITAL, applicable jointly to Small-pox cases and to Vaccination, and stating whether such Income depends on Public Subscriptions, or on Endowment, or both; and if on both, the amount of each in the last Five Years.

THE ordinary revenue of the Small-pox Hospital is derived from three sources:—1st, Voluntary donations and subscriptions, including payments by parishes for the support of their pauper poor afflicted with small-pox; 2dly, Dividends on invested capital; and 3dly, The rent of the Hospital Field.

REVENUE OF THE SMALL-POX HOSPITAL.

YEARS.	ORDINARY REVENUE.				SUNDRY RECEIPTS.	TOTAL RECEIPTS of the YEAR.
	Subscriptions and Donations.	Dividends on Invested Capital.	Rent of Hospital Field.	Total Ordinary Revenue.		
	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.
1828 -	245 13 9	630 - -	21 - -	896 13 9	1,061 1 -*	1,957 14 9
1829 -	424 3 8	916 10 -	10 10 -	1,351 3 8	110 5 -*	1,461 8 8
1830 -	348 2 3	774 - -	10 - -	1,132 2 3	- - -	1,132 2 3
1831 -	290 3 -	774 - -	14 - -	1,078 3 -	- - -	1,078 3 -
1832 -	279 19 5	774 - -	- - -	1,053 19 5	80 5 -†	1,134 4 5

* These were extra subscriptions for the repair of the building, with produce of the sale of stock.
† Produce of the sale of old stores.

G. Gregory, M. D.

— No. 7. —

AN ACCOUNT, stating when Vaccination was first established at the SMALL-POX HOSPITAL.

DATE of first experiments on vaccination at the Hospital, by Dr. Woodville, 21st January 1799.

Vaccination practised conjointly with small-pox inoculation, 1799 to 1808.

Discontinuance of inoculation to out-patients, and exclusive practice of vaccination to them, 28th April 1808.

Discontinuance of inoculation to in-patients, 30th June 1822.

Small-pox Hospital, 15 March 1833.

G. Gregory, M. D.
Physician to the Small-pox and Vaccination Hospital, King's Cross, St. Pancras.

— No. 8. —

MEMORANDA and Explanations, to accompany "a Return, given at p. 140 of the Evidence, of the Number and relative Mortality of the Cases received into the Small-pox Hospital of Small-pox subsequent to Vaccination, during the period of Seven Years, viz. from 1826 to 1832, inclusive."

1. THE entries in the Hospital register, stating whether the patient was "vaccinated or otherwise," are invariably made on the day of admission, when the result of the case must be always, more or less, a matter of doubt. A case is entered as being "subsequent to vaccination" whenever there appear reasonable grounds for presuming that the operation had been duly performed; the grounds of judgment being, 1st, the statements and distinct recollections of the patient himself; 2dly, the concurrent testimony of relatives and friends; 3dly, the examination of documents and registers (where practicable); 4thly, evidence that the operation had been performed by an authorized medical practitioner; 5thly, examination of the cicatrix; 6thly, in some few cases the general aspect and character of the eruption on the day of admission.

2. The interval between the performance of vaccination and the occurrence of small-pox in the 619 cases enumerated fluctuated between 7 and 30 years. The average interval was 18 years.

3. The 40 deaths enumerated in column 5, as having occurred from small-pox after vaccination, include not only those which arose from the direct, specific and acknowledged effects of small-pox, but also those which arose from disorders with which the small-pox became, in its course, accidentally associated, such as inflammation of the lungs, inflammation of the bowels, and erysipelas. The proportion was, 30 of the former to 10 of the latter.

4. The proportion between the numbers admitted after vaccination and the gross admissions, also between the deaths after vaccination and the gross number of deaths, will be found to correspond closely with the only other tables which I have seen published bearing upon this question; viz. the Reports by the College of Health of Stockholm, of the Swedish epidemic of 1824,* and that of Dr. Forbes, Superintendant-general of the Vaccine Establishment of Ceylon, of the epidemic of that island, in 1830†.

GENERAL TABLE of RESULTS, with regard to the Frequency and Mortality of Small-pox after Vaccination.

—	TOTAL CASES OF SMALL-POX.		TOTAL OF SMALL-POX AFTER VACCINATION.		REMARKS.
	Admissions.	Deaths.	Admissions.	Deaths.	
Ceylon epidemic of 1830† - - -	414	94	196	16	Vaccinated with marks, satisfactory and unsatisfactory.
Results of seven years' experience at the Small-pox Hospital of London - -	1,785	534	619	30 / 10 = 40	Vaccinated with cicatrices.
Swedish epidemic of 1824* - - - -	- -	560	- -	34	"Vaccinés certains."

5. No comparison can be fairly instituted between the cases of small-pox after vaccination and those of small-pox after inoculation, because the objects of these two operations are diametrically opposed to each other. The object of inoculation is to *give* small-pox, that of vaccination is to *prevent* it. A person is not inoculated to prevent a *second* attack of small-pox, but to give a *first*. The following Table, therefore, is not intended to contrast the effects of vaccination and inoculation, but simply to show how rare second attacks of small-pox are.

* See Magendie's "Journal de Physiologie," tom. 6, p. 137.

† See "London Medical Gazette," vol. 10, p. 18.

RETURN of the Number of PATIENTS admitted into the SMALL-POX HOSPITAL during the Seven Years from 1826 to 1832, inclusive, having Small-pox a second time.

YEAR.	Total Admissions into the Small-pox Hospital.	Number having Small-pox after Inoculation.	Deaths by Small-pox after Inoculation.
1826	168	1	—
1827	305	3	—
1828	202	—	—
1829	328	4	—
1830	259	2	—
1831	193	—	—
1832	330	3	1
TOTAL in Seven Years	1,785	13	1

31 Weymouth-street,
28 March 1833.

G. Gregory, M. D.
Physician of the Small-pox and Vaccination Hospital, at St. Pancras.

— No. 9. —

DR. GEORGE GREGORY'S COMPARATIVE ESTIMATE of the EXPENSE of the present NATIONAL VACCINE BOARD, and of the PROVISIONAL and PERMANENT ESTABLISHMENTS, recommended by him to the Select Committee of the House of Commons.

EXISTING ESTABLISHMENT of the National Vaccine Board.	Amount per Annum.	PROVISIONAL ESTABLISHMENT recommended by Dr. G. Gregory, for the First Year, ending 5th April 1834.	Amount per Annum.	PERMANENT ESTABLISHMENT recommended by Dr. G. Gregory, to take effect from the 5th April 1834.	Amount per Annum.
Salaries of Superintending Officers:	£.				
President £. 100					
Two members of the Board, at 100 *l.* each 200					
Registrar 200	725	Salary of the Superintendent of Vaccination	300	Salary of the Superintendent of Vaccination	300
Inspector 200					
Treasurer 25					
Secretary	50	Allowance to ditto for a clerk	50	Allowance to ditto for a clerk	50
Office rent, in Russell-place	140	Ditto to ditto for an office	50	Ditto to ditto for an office	50
Office messenger, in ditto	52	Wages of an office messenger	52	Wages of an office messenger	52
		Salaries of Vaccinators:		Salaries of Vaccinators:	
		Surgeon of the Small-pox Hospital £. 25		Surgeon of the Small-pox Hospital £. 25	
		Superintendent of the London Vaccine Institution 35		Superintendent of the London Vaccine Institution 35	
Salaries of Vaccinators; £.		Vaccinator of the Surrey Chapel station 150		Vaccinator of the Surrey Chapel station, as long as Mr. Gillham holds that office 150	
Two in London, at 150 *l.* each, 300		Vaccinator of the station in Liverpool-street 50		Two principal Vaccinators in London, for the east and west ends, at 105 *l.* each 210	
Two in London, at 100 *l.* each, 200	900	Vaccinator of the station in Baker-street 50	485	Allowance to the Small-pox and Vaccination Hospital at St. Pancras, in aid of its branch stations 50	470
Eight in London, at 50 *l.* each, 400		Five Vaccinators in other stations in London, at 35 *l.* each 175			
Incidental expenses, including taxes, printing, stationery, &c. &c., &c.	333	Incidental expenses, including printing, stationery and implements of Vaccination	113	Incidental expenses of the Establishment	128
		Annual allowance to six provincial stations, at Edinburgh, Glasgow, Newcastle, Manchester, Liverpool and Bristol, at 25 *l.* each	150	Annual allowance to six provincial stations, at Edinburgh, Glasgow, Newcastle, Manchester, Liverpool and Bristol, at 25 *l.* each	150
		To meet the expenses necessarily attendant upon the organization of the new metropolitan and provincial establishments	300		
Total of Existing Establishment £.	2,200	Total of the Proposed Establishment for the First Year £.	1,500	Total of the Proposed Permanent Establishment £	1,200

31, Weymouth-street, London,
25 March 1833.

George Gregory, M. D.
Physician of the Small-pox and Vaccination Hospital at St. Pancras.

MEMORANDA, illustrating the above Estimate.

1. The general superintendence of the Establishment to be vested in an officer, appointed by the Secretary of State, who will perform the duties heretofore assigned to the registrar, inspector and treasurer.

2. The house and station in Russell-place to be forthwith discontinued, and three of the least efficient of the other stations.

3. The present office messenger to be retained.

4. The Small-pox Hospital to become the central station for the north of London. The resident surgeon to receive a small remuneration, for the additional duties imposed upon him by this arrangement.

5. A grant to be made in aid of the London Vaccine Institution, subject to the superintendence of the Government officer.

6. The present Establishment at Rowland Hill's Chapel to become the central station for the south of London. The salary to be continued as before, during the incumbency of Mr. Gillham, provision being made for attendance on two additional days in the week.

7. As a provisional arrangement, seven of the present stations of the National Vaccine Establishment to be continued; two at one-half, and five at two-thirds of the present salaries *.

8. Small sums to be annually appropriated for the encouragement of vaccine stations in large towns; those selected in the Estimate possess a population adequate to keep up their own supply of lymph.

9. The sum of 300*l.* is suggested as requisite for the outfit of the new provincial and metropolitan stations; for the travelling expenses of the Superintendent while engaged in organizing the distant stations; to provide gratuities for reduced Vaccinators; and, generally, for unforeseen contingencies.

10. As a permanent arrangement, two principal stations to be formed in London, on the same plan as that of the Surrey Chapel station; one in the east, and one in the west-end. The salary to be 100 guineas, for which the Vaccinator is to provide a suitable apartment, subject to the approval of the Government Superintendent.

11. The sum of 50*l.* to be granted next year to the Small-pox Hospital, in support of the four branch stations contemplated by that Institution, subject to the usual conditions.

12. The remaining stations of the National Vaccine Establishment to be discontinued on the 5th April 1834.

No. 10.

PROPOSED REGULATIONS for the BRANCH ESTABLISHMENTS of the HOSPITAL for SMALL-POX and VACCINATION at *St. Pancras*.

THE Hospital to be the central station.

1st Branch to be at Paddington, near the Yorkshire Stingo.

2d Branch to be at Westminster, near Queen-square.

3d Branch to be at Tower Hill.

4th Branch to be at Spitalfields, near Osborn-street or Sun-street.

To advertise for respectable established vaccinators.

To select one for each district to be recommended to the next general court.

Vaccinators to sign the rules and regulations on their appointment.

Each vaccinator to have a properly painted board or brass plate to be affixed on his door or house; to be provided at the Hospital expense.

Hours of vaccination to be from 10 to 11 o'clock three times a week; Monday, Wednesday and Friday.

Registers to be kept similar to the one at the Hospital; to be provided at the expense of the Hospital.

An Abstract or Quarterly Report to be transmitted to the Hospital, according to printed form.

Each station to be supplied with lymph and powders from the Hospital.

Vaccinators not to solicit money from any vaccinated person, but to have a box for donations and a book for subscriptions, and the account paid to the Committee half-yearly.

The physician to visit the stations at the vaccinating hours, to examine the book, and ascertain that all goes on properly.

One or more of the Committee and Visiting Governors to make occasional visits at vaccination hours.

District vaccinators to supply all medical men and others in the neighbourhood with lymph gratis, entering the names of all persons supplied in a book.

The vaccinator in his own (unavoidable) absence at the regular hours to appoint a competent apprentice or friend to take his place, for whose careful attention to the business he holds himself responsible.

All uncommon cases and cases threatening danger from severe inflammation, &c. to be reported to the physician (by post) at the Hospital forthwith.

Patients vaccinated at the Hospital may attend in the subsequent stages of the process at any of the district stations on producing a printed ticket given to them at the Hospital.

* It is presumed that the deficiency will in a great degree be supplied by the private subscriptions of medical gentlemen, in return for accommodation afforded them in the supply of subjects under vaccination for the use of their private patients.

PROPOSED PLATE FOR DOORS.

Vaccination.

Branch from the Small-Pox and Vaccination Hospital.

Patients Vaccinated here gratis on Mondays, Wednesdays and Fridays, from 10 to 11.

SMALL-POX AND VACCINATION HOSPITAL.

RETURN of Patients Vaccinated at the District Station from

to

		REMARKS.
Number vaccinated at the Hospital, and subsequently attended at this station.		
Numbers vaccinated at this station.		
Number of charges of lymph issued to medical men and others.		

. . . . . Vaccinator.
. . . . . Residence.
. . . . . Date.

— No. 11. —

COPY of an Application made by the Governors of the SMALL-POX and VACCINATION HOSPITAL, *St. Pancras,* for liberty to transmit Vaccine Lymph Free of Postage.

Small-Pox and Vaccination Hospital, King's Cross, St. Pancras,
My Lord, 7th February 1833.

I AM directed by a General Court of Governors of this Hospital to inclose to your Lordship an account of vaccinated patients for the past year, and lymph supplied, and to draw your Lordship's attention to the exertions made by this Hospital to promote perfect vaccination.

From this account your Lordship will perceive that whilst the Governors are affording to the public the best method of vaccination within its walls, they are not unmindful of the great benefit afforded to medical practitioners in the metropolis, country and abroad, by the supply of Vaccine Lymph, which they distribute to a large extent, as appears by the inclosed account. In this distribution the Governors have to lament the want of means in transmitting lymph free of postage; the Court of Governors therefore entreat your Lordship's granting to this Hospital the transmission of lymph free of postage, which will greatly promote the public benefit, and further extend the blessing of vaccination.

Enclosed I have the honour to hand to your Lordship an account of this Hospital.

Waiting the honour of your commands,
I have the honour to be, &c.
(signed) *James Clift*, Secretary.

Sir, Whitehall, 10th February 1833.

I AM directed by Viscount Melbourne to acknowledge the receipt of your letter of the 7th instant, with its enclosure, containing a request on the part of the Governors of the Small-Pox and Vaccination Hospital, King's Cross, St. Pancras, to be enabled to transmit lymph free of postage; and I am to acquaint you, in reply, for the information of the Governors, that Lord Melbourne is under the necessity of declining to comply with their request.

I am, your obedient servant,
(signed) *S. M. Phillipps.*

To the Secretary to the Small-Pox and Vaccination Hospital, King's Cross, St. Pancras.

Appendix (C.)

LONDON VACCINE INSTITUTION AND ROYAL JENNERIAN SOCIETY.

— No. 1. —

RETURN of the NUMBER of PERSONS VACCINATED by the London Vaccine Institution and Royal Jennerian Society (these being united).

				Number Vaccinated.	
In the year	1828	to January	1829	4,252	by Dr. Walker.
—	1829	—	1830	7,816	Ditto.
—	1830	—	1831	4,075	Ditto.
—	1831	—	1832	4,440	by Dr. Epps.
—	1832	—	1833	5,641	Ditto.

These two united Societies have as their stations for vaccination, Union-court, Holborn-hill; 18, Providence-row, Finsbury-square; and St. John's Vestry-room, Horselydown.

— No. 2. —

RETURN of the NUMBER of CHARGES of LYMPH Supplied, and to what Number of Applicants, and (if such Return can be made) of the Number of Persons Vaccinated by such Applicants.

				Charges.	Applicants.
In the year	1828	to January	1829	51,284	11,617
—	1829	—	1830	52,284	12,506
—	1830	—	1831	43,387	9,504
—	1831	—	1832	42,752	no return.
—	1832	—	1833	43,164	no return.

Note.—In regard to the number of applicants, it is proper to state, that as the principal part of the applications come through wholesale London Chemists and Druggists, of whom each firm may receive at one time half a dozen or a dozen pairs of glasses containing lymph, together with points, the number of applicants, and the supplies granted, may not seem to be in a corresponding ratio.

It may also be proper to state that the following wholesale Chemists and Druggists are constantly receiving supplies for country practitioners:

Allen & Co., Plough-court.
The Apothecaries' Company.
Barron, Harvy & Co., Giltspur-street.
John Bell & Co., Oxford-street.
Brown, Roper & Co., Falcon-square.
Byerley & Co., Holborn.
Cole & Co., Holborn.
Corbyn & Co., Holborn.
Curtis & Co., Old Fish-street.
Davy, Mackmurdock & Co., Gould-square.
Drew, Heyward & Co., College-hill.
Evans & Lescher, Cripplegate.
Gale, Baker & Warde, Bouverie-street.
Grounds & Co., Threadneedle-street.
Hodgkinson, Brandram & Co., Upper Thames-street.
Hodgkinson & Co., Snow-hill.
Howard, Jewell, Gibson & Co., Stratford.
Jones & Wood, St. Mary-Axe.
Kempson, Yates & Co., Snow-hill.
Manley & Stone, Paternoster-row.
Smith & Co., Fenchurch-street.
White, Catherley & Co., Ludgate-hill.
Winstanley & Son, Poultry.

— No. 3. —

RETURN of the APPLICATIONS made to the BOARD for the supply of LYMPH, on the part of the Public Officers of any British Colony or Dependency, or Foreign Government, during the said period of Five Years.

1. FROM British Colonies or Dependencies:

At St. Helena, Dr. M'Ritchie,
At Berbice - Dr. Beresford,
At Gibralter - several medical men
} have been supplied for a great number of years.

At Quebec the London Vaccine Institution has a branch society, called the Quebec Vaccine Institution, sending a Report yearly to the London Vaccine Institution, the latter Institution sending supplies of Vaccine matter.

The West Indies are supplied by these Institutions through the following West India houses:

Manning & Anderton, New Bank-buildings.
Beckford, William, Finsbury-circus.
Delf, William, Finsbury-circus.
Douglas, Anderson & Co. Broad-street.
Fullarton & Macdonald, Old Broad-street.
Giro, James, Finsbury-circus.
Hibbert, Messrs. G. W. & S., Billiter-lane.
Milne, Alexander, George & Co. George-yard.
Molloy, P. J., Newfoundland.
Richard, Dr. Alexander, Grenada.
Nockels & Co., Nags-head-court.
Rogers, Frederick, Finsbury-square.

2. In regard to Foreign Governments, the following Ambassadors have received supplies from these Institutions:

	Brazilian.	Colombian.	Buenos Ayres.	Mexican.
In the year 1828 to January 1829 - -	monthly	monthly	monthly	monthly
— 1829 — 1830 - -	ditto	ditto	ditto	ditto
— 1830 — 1831 - -	ditto	ditto	ditto	ditto
— 1831 — 1832 - -	ditto	ditto	ditto	ditto
— 1832 — 1833 - -	fortnightly	fortnightly	fortnightly	fortnightly

The French Ambassador has been supplied for several years, though not so regularly as the above.

The Spanish Ambassador has been supplied.

Vaccine matter is sent by these Institutions to Calais and Boulogne every month or six weeks.

These Institutions supplied the Sandwich Islands with vaccine matter; they sent it out in the Blossom, (Captain Byron,) the ship that conveyed the remains of the King and the Queen of those isles: since that time the supply has been continued through Mr. Rooke, a gentleman resident at one of those islands.

The Belgian Government now subscribes to and receives supplies from these Institutions.

These Institutions send also to the Coast of Africa, to Cape Coast Castle, to Fernando Po. One ship that was lost on returning home from the Coast of Africa contained, as a present to these Institutions, two ounces of gold-dust.

These Institutions supply the East Indies.

— No. 4. —

RETURN of the Applications made to the Board for the supply of Lymph, by any Public Department, during the said Period.

In reference to the above, it may be proper to state, that taking the phrase "Public Department" as comprising Dispensaries and Hospitals, these Institutions have supplied many, the accounts of which the Board of Managers did not preserve. These Institutions have supplied

The Aldersgate Dispensary,
The Ipswich Dispensary.
The Hull Dispensary.
The Shoreditch Workhouse.
The Brighton Lying-in Institution; and now these Institutions send a fortnightly supply to the Birmingham General Hospital.

Besides these supplies, these Institutions supply matter to Aberdeen, the Island of Mull, and other distant parts of Scotland; and, in referring to this, it is just to notice the kindness of Sir Francis Freeling in aiding the cause of vaccination, in franking some of the letters containing supplies to these distant parts.

— No. 5. —

AN ACCOUNT of the EXPENDITURE by the LONDON VACCINE INSTITUTION, or JENNERIAN SOCIETY, in support of VACCINATION, during each Year of the said period.

	£.	s.	d.
In the year 1828 to January 1829 - - - - - -	768	10	6
— 1829 — 1830 - - - - - -	748	10	6
— 1830 — 1831 - - - - - -	423	13	–
— 1831 — 1832 - - - - - -	668	11	–
— 1832 — 1833 - - - - - -	601	18	6*

— No. 6. —

AN ACCOUNT of the REVENUE of the LONDON VACCINE INSTITUTION, or ROYAL JENNERIAN SOCIETY, applicable to VACCINATION, during each Year of the said period, stating whether such Revenue was raised by Public Subscription or otherwise.

IN reference to the above, it is proper to notice, that the whole of the yearly revenue is occupied in matters connected with vaccination, Dr. Epps receiving for his daily attendance at the stations 100 *l.* a year, the remaining sum being expended upon secretaryship, expenses of postage, printing of yearly report, &c. &c. The whole amount is raised by donations and subscriptions.

	Yearly Revenue.		
	£.	s.	d.
In the year 1828 to January 1829 - - - - - -	802	–	–
— 1829 — 1830 - - - - - -	786	–	–
— 1830 — 1831 - - - - - -	379	16	–
— 1831 — 1832 - - - - - -	637	8	–
— 1832 — 1833 † - - - - - -	571	16	–

Note.—In regard to the subscribers, upwards of 200 are medical practitioners.

— No. 7. —

AN ACCOUNT, stating when the LONDON VACCINE INSTITUTION, or JENNERIAN SOCIETY, as far as regards Vaccination, was first Established.

THE Royal Jennerian Society was established in the year 1803, a public meeting having been held, with this object in view, on the 19th of January in that year; and among the names attached to the requisition is that of His present Gracious Majesty.

Dr. Walker was elected resident inoculator in the same year.

Dr. Walker resigned his office in 1806.

The patients followed Dr. Walker. His friends determined to establish another institution, and the London Vaccine Institution arose, in 1806, under very promising circumstances. This Society has continued from that period to the present day, being, like the Jennerian Society, wholly supported by voluntary contributions.

After Dr. Walker left the Royal Jennerian Society it became extinct. The National Vaccine Institution was, by the interest of Mr. George Rose, placed in its stead, and a yearly grant of 3,000 *l.* a year was made to it by Parliament.

In August 1813 several of the Life Governors of the Royal Jennerian Society met, and the Society was resuscitated, and has continued to the present day dispensing its benefits.

89, Great Russell-street,
14 March 1832.

John Epps, M. D.
Medical Director of the Royal Jennerian and London Vaccine Institutions.

* Stated in Mr. Johnstone's Letter, Appendix, No. 8, to be the expenditure of the London Vaccine Institution only. That of the United Societies is stated in the corrected return, p. 154, to be 937 *l.* 16 *s.* 3 *d.*

† This is the income for 1832 of the London Vaccine Institution only. The income of that Institution and of the Royal Jennerian Society together amounted to 894 *l.* 16 *s.* 6 *d.* *See* Mr. Johnstone's Letter, Appendix, No. 8, and corrected return, p. 154.

— No. 8. —

LETTER from Mr. *Andrew Johnstone*, Secretary of the London Vaccine Institution, to *Henry Warburton*, Esq. M. P.

Vaccine House, 18, Providence-row, Finsbury-square,
Sir, 1 April 1833.

AGREEABLY to your request, I have the honour to enclose you a statement of the Receipts and Expenses of the Royal Jennerian and London Vaccine Institutions for the year 1832. I hope the detail is as full as you require it to be made; to make it fuller would be both tedious and voluminous.

The unavoidable expense of printing necessary to obtain new subscriptions forms an expensive item.

The benefits of these Institutions being open to the poorer classes, who require no recommendation to obtain them, do not give any patronage to the subscribers, consequently they do not know what benefit they are bestowing on society until they receive their annual reports.

Had these Institutions any certain independency the greater part of their expense would not be necessary, and the great exertion to obtain new subscribers done away with.

It is much more difficult to obtain new subscriptions than formerly, as most of those who beheld the real terrors of small-pox have passed away. The object of these Institutions would be greatly facilitated by the privilege of free postages; it would greatly increase the demand for vaccine ichor. At present many country practitioners defer their applications until they require drugs from their London druggists, in consequence of the expense of postage.

The three vaccine stations of these Institutions are most eligibly situated, being in the centre of the most densely populated parts of the town, inhabited by the poorer classes of society.

I have, &c.
Andrew Johnstone, Sec.

RECEIPTS and EXPENSES of the ROYAL JENNERIAN and LONDON VACCINE INSTITUTIONS, in the Year 1832.

	£.	s.	d.
RECEIPTS - - - - - - - - - - -	894	16	6

EXPENSES:

	£.	s.	d.
Medical Director and Vaccinator - - - - - -	100	–	–
Secretary - - - - - - - - - - -	210	–	–
Collector - - - - - - - - - - -	82	5	–
TRADESMEN'S ACCOUNTS:			
Letter-press printing - - - - - - - - -	60	12	–
Engraving - - - - - - - - - - -	80	16	9
Lithographic printing - - - - - - - - -	11	10	–
Binding reports - - - - - - - - - -	6	10	6
Glasses for vaccine ichor - - - - - - - -	5	2	–
Ivory points for ditto - - - - - - - - -	2	10	–
Rents of stations - - - - - - - - -	89	5	–
Servants attending the stations - - - - - - -	25	–	–
MISCELLANEOUS EXPENSES:			
Postages, foreign, general and twopenny; translating foreign letters, and transmitting matter; stationery; delivering annual reports, with matter, free of expense, to the country subscribers; annual meeting and advertisements; tinfoil for the virus, coals, &c. &c. - - - - - - - -	198	5	2
	871	16	5*

* Corrected Return at page 154 gives amount of expenses 937*l.* 16*s.* 3*d.*

—No. 9.—

LETTER from Mr. *Andrew Johnstone*, Secretary to the London Vaccine Institution, to *Henry Warburton*, Esq. M. P.

Head Vaccine Station, No. 18, Providence-row, Finsbury-square,
Sir, 11 April 1833.

I HAVE reflected on myself ever since Dr. Epps' examination, for not explaining to you how the mistake arose respecting the amount of money received last year.

Dr. Epps has nothing whatever to do with the management of these Institutions; he is simply the Vaccinating Physician.

The sum stated by him was the amount of the London Vaccine Institution only, not the Jennerian also: the collective amount of both, you will find by the Reports herewith, is the exact amount I had the honour to send you.

It is intended henceforward to make only one Report, and print the whole of the subscribers to both Institutions in that Report.

The country Surgeons are not satisfied unless we give them a representation of the Pock in all its stages in their Reports, the same as in the Reports I now have the honour to send you herewith.

The whole management of these Institutions rests with myself, under the sanction of the Committee; the persons employed are as below stated, and I assure you we are very fully occupied.

Physician, Secretary, Clerk, Collector, Assistant, Messenger.

I have the honour to be, &c.

Andrew Johnstone,
Secretary.

—No. 10.—

RESOLUTION of the GOVERNORS of the UNITED LONDON VACCINE INSTITUTION and ROYAL JENNERIAN SOCIETY as to the supply of Vaccine Lymph.

AT Special General Meetings of the Governors, convened by Public Advertisement, held at No. 6, Bond-court, Walbrook, on the 1st, 5th, 12th, and 20th July 1830, for the purpose of investigating the state of the Funds of these Institutions—

It is found, from a most minute and scrupulous investigation, that a very large majority of the early subscribers to, and supporters of, the cause of vaccination, particularly among the nobility and gentry, have departed this life. It is further found that their successors, from the circumstance, it is supposed, of never having experienced the malignancy and injurious consequences of small-pox (a protection afforded by the liberal zeal of their progenitors), have not continued the originally bestowed support; thereby leaving the Vaccine Institutions to depend for a continuance in a great measure on medical gentlemen, who are supplied with vaccine matter therefrom.

The Board having considered all these circumstances with the greatest care, deem it most consonant with propriety, and most likely to promote the interests of these Institutions, and thereby promoting the interests of the public at large, have come to the following Resolution:

Resolved,

That in consequence of the very reduced state of the funds, and the great expense these charitable Institutions are exposed to, that from and after the 1st day of August next, vaccine matter shall be supplied free of expense to subscribers only, or by orders from subscribers; all other applicants to pay according to the quantity of ichor required.

— No. 11. —

LETTER from Mr. *Andrew Johnstone*, Secretary to the London Vaccine Institution, to *Henry Warburton*, Esq., M.P.

No. 18, Providence-row, Finsbury,
28 August 1833.

Sir,

The accompanying statement of the expenditure of the Royal Jennerian and London Vaccine Institutions for the year 1832 is divided under the two heads you mention, viz. "for promoting Vaccination and promoting Subscriptions," with as much accuracy as the general mode of the expenditure will admit, and, as you will perceive, is liable to great fluctuation.

The expense of obtaining new subscriptions in general is nearly equal to the collection from them; but without pursuing that plan the Institutions would soon cease.

The changes by declines and casualties being on an average once in four years, hence the necessity of soliciting new subscriptions.

Dr. Epps' statement was only one of the Institutions; the accompanying is of both; and any further information you may deem necessary for your guidance will afford me pleasure.

I have the honour to be, &c.

Andrew Johnstone, Secretary.

ACCOUNT of the Receipts and Disbursements of the Royal Jennerian and London Vaccine Institutions in the following Years:

	Receipts.			Disbursements.		
	£.	s.	d.	£.	s.	d.
In the year 1828	1,237	6	6	1,329	10	11
— 1829	1,027	8	–	1,004	9	8
— 1830	898	13	–	945	–	7
— 1831	978	5	–	962	1	7
— 1832	894	16	6	937	16	3

DETAIL of Expenditure in the Year 1832.

	£.	s.	d.
1st *Head, for Promoting Vaccination*; viz.			
Salary of Medical Director and Vaccinator	100	–	–
Ditto of Secretary	210	–	–
Rents and taxes, Providence-row	62	–	–
Ditto - ditto, Holborn-hill	27	5	–
St. John's Vestry-room, granted free of expense by the Churchwardens	—		
Repairs of the stations	26	1	–
Stationery	21	12	–
Postages, general and twopenny	15	12	2
Ditto, foreign	7	5	–
Glasses, ivory points, and tin foil	12	15	–
Transmitting foreign packets of virus	6	16	–
Translating foreign letters	5	10	–
Messenger	25	–	–
Keeper of St. John's Vestry-room, gratuity	2	2	–
Postman, gratuity	2	–	–
Printed bills, notices of vaccination	6	10	–
Coals	8	–	–
£.	538	8	2
2d *Head, for Promoting Subscriptions*; viz.			
Salary and poundage of Collector	82	5	–
Ditto of Clerk	80	–	–
*Ditto of Assistant Collector	66	–	–
Expense of reports	54	2	–
Engraving and copper-plate printing	80	16	9
Lithographic printing	11	10	–
Binding reports	6	10	6
Delivering the reports	5	–	–
Annual meeting and advertisements	13	4	–
£.	399	8	3

* This item was omitted in the former statement.

Appendix (D).

ROYAL MILITARY ASYLUM, CHELSEA.

RETURN of the Number of CHILDREN who have been Admitted into the ROYAL MILITARY ASYLUM CHELSEA, from the commencement of the Institution, 29th August 1803, to the 29th August 1833; specifying the Number Vaccinated who had Small-pox, Varicella, &c. &c. &c.

ROYAL MILITARY ASYLUM, CHELSEA. - - - - - -

RETURN of the Number of CHILDREN who have been Admitted into the ROYAL MILITARY ASYLUM, CHELSEA, Vaccinated who had Small-pox,

YEARS.	Number admitted into the Asylum in each Year.			Number who quitted the Asylum in each Year.			Number reputed to have had Small-pox previous to Admission.			Number reputed to have been Vaccinated previous to Admission.			Number Vaccinated at the Asylum subsequent to Admission.		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.
1803	76	48	124	-	-	-	69	30	99	-	1	1	7	17	24
1804	311	156	467	5	3	8	226	109	335	20	20	40	62	27	89
1805	239	100	339	23	15	38	166	65	231	16	12	28	56	23	79
1806	92	30	122	32	22	54	72	21	93	9	5	14	11	4	15
1807	93	41	134	75	32	107	55	27	82	21	11	32	17	3	20
1808	148	65	213	82	27	109	90	40	130	40	13	53	18	11	29
1809	158	54	212	88	37	125	102	41	143	38	9	47	17	4	21
1810	107	45	152	165	42	207	69	24	93	26	16	42	12	5	17
1811	204	128	332	129	79	208	109	62	171	73	54	127	21	12	33
1812	129	60	189	126	63	189	73	29	102	46	20	66	10	11	21
1813	127	61	188	119	57	176	59	21	80	50	30	80	18	10	28
1814	202	77	279	143	71	214	91	32	123	98	38	136	13	7	20
1815	105	56	161	108	64	172	32	10	42	64	37	101	9	9	18
1816	294	79	373	122	57	179	117	27	144	156	46	202	21	6	27
1817	313	44	357	129	67	196	117	18	135	180	22	202	16	4	20
1818	233	84	317	140	64	204	77	28	105	140	49	189	16	7	23
1819	155	78	233	114	70	184	50	18	68	84	59	143	21	1	22
1820	239	55	294	166	51	217	66	17	83	159	33	192	13	5	18
1821	183	57	240	194	103	297	41	17	58	136	39	175	6	1	7
1822	97	46	143	190	56	246	18	8	26	76	37	113	3	1	4
1823	171	12	183	225	90	315	28	1	29	132	11	143	11	-	11
1824	234	-	234	232	-	232	46	-	46	182	-	182	6	-	6
1825	226	-	226	210	-	210	47	-	47	167	-	167	12	-	12
1826	171	-	171	185	-	185	16	-	16	145	-	145	10	-	10
1827	169	-	169	168	-	168	21	-	21	139	-	139	9	-	9
1828	121	-	121	157	-	157	15	-	15	99	-	99	7	-	7
1829	37	-	37	176	-	176	3	-	3	31	-	31	3	-	3
1830	97	-	97	129	-	129	7	-	7	78	-	78	12	-	12
1831	62	-	62	137	-	137	4	-	4	48	-	48	10	-	10
1832	47	-	47	143	-	143	1	-	1	38	-	38	8	-	8
1833	12	-	12	86	-	86	-	-	-	7	-	7	5	-	5
General Total -	4,852	1,376	6,228	3,998	1,070	5,068	1,887	645	2,532	2,498	562	3,060	460	168	628

ROYAL MILITARY ASYLUM, CHELSEA.

from the commencement of the Institution, 29th August 1803, to the 29th August 1833; specifying the Number Varicella, &c. &c. &c.

Number who had casual Small-pox at the Asylum, not having previously undergone that Disease or been Vaccinated.			Number who had Small-pox after reputed Small-pox.			Number who had Small-pox after reputed Vaccination.			Number who had Small-pox after Vaccination at the Asylum.			Number who had Varicella after reputed Small-pox.			YEARS.
Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1803
-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1804
2	1	3	1	1	2	-	-	-	-	-	-	1	-	1	1805
-	-	-	1	-	1	-	-	-	-	-	-	1	1	2	1806
1	-	1	2	-	2	-	-	-	-	-	-	-	-	-	1807
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1808
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1809
-	1	1	2	4	6	1	-	1	-	-	-	-	-	-	1810
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1811
-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	1812
-	1	1	1	2	3	-	-	-	1	-	1	-	1	1	1813
-	1	1	-	-	-	-	3	3	-	-	-	-	-	-	1814
-	-	-	1	1	2	-	-	-	-	-	-	-	1	1	1815
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1816
1	-	1	1	-	1	-	1	1	1	-	1	-	2	2	1817 *
1	-	1	-	2	2	-	1	1	-	-	-	-	-	-	1818
-	-	-	-	1	1	1	-	1	-	1	1	1	3	4	1819
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1820
-	-	-	-	-	-	2	-	2	-	-	-	1	-	1	1821
-	-	-	-	-	-	-	-	-	-	-	-	1	2	3	1822
-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	1823
-	-	-	-	-	-	1	-	1	-	-	-	1	-	1	1824
-	-	-	3	-	3	4	-	4	-	-	-	-	-	-	1825
-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	1826
-	-	-	-	-	-	1	-	1	-	-	-	1	-	1	1827
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1828
-	-	-	-	-	-	2	-	2	-	-	-	-	-	-	1829
-	-	-	1	-	1	4	-	4	-	-	-	-	-	-	1830
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1831
-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	1832
-	-	-	-	-	-	2	-	2	-	-	-	-	-	-	1833
5	4	9	15	11	26	19	5	24	2	1	3	8	11	19	General Total.

Return *continued over leaf, p.* 158.

ROYAL MILITARY ASYLUM, CHELSEA—Return *continued from p.* 157.

YEARS.	Number who had Varicella after reputed Vaccination.			Number who had Varicella after Vaccination at the Asylum.			Number who, after having Small-pox at the Asylum, had secondary Small-pox or Varicella.			Number who Died of Small-pox at the Asylum.		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.
1803	-	-	-	-	-	-	-	-	-	-	-	-
1804	-	-	-	-	-	-	-	-	-	-	-	-
1805	1	-	1	-	-	-	-	-	-	-	1	1
1806	-	-	-	-	-	-	-	-	-	-	-	-
1807	-	-	-	-	-	-	-	-	-	1	-	1
1808	2	-	2	-	-	-	-	-	-	-	-	-
1809	-	-	-	-	-	-	-	-	-	-	-	-
1810	-	-	-	-	-	-	-	-	-	1	-	1
1811	-	-	-	-	-	-	-	-	-	-	-	-
1812	1	-	1	-	-	-	-	-	-	-	-	-
1813	1	-	1	-	-	-	-	-	-	1	-	1
* 1814	-	1	1	-	-	-	-	-	-	-	-	-
1815	1	-	1	-	-	-	-	-	-	-	-	-
1816	-	-	-	-	-	-	-	-	-	-	-	-
1817	4	1	5	-	-	-	-	-	-	1	-	1
1818	3	6	9	2	-	2	-	-	-	-	-	-
1819	2	2	4	-	-	-	-	-	-	-	-	-
1820	-	3	3	1	-	1	-	-	-	-	-	-
1821	2	-	2	-	-	-	-	-	-	-	-	-
1822	2	3	5	-	1	1	-	-	-	-	-	-
1823	4	1	5	-	-	-	-	-	-	-	-	-
1824	1	-	1	-	-	-	-	-	-	-	-	-
1825	7	-	7	-	-	-	-	-	-	-	-	-
1826	6	-	6	-	-	-	-	-	-	-	-	-
1827	3	-	3	-	-	-	-	-	-	-	-	-
1828	10	-	10	-	-	-	-	-	-	-	-	-
1829	4	-	4	1	-	1	-	-	-	-	-	-
1830	10	-	10	-	-	-	-	-	-	-	-	-
1831	1	-	1	-	-	-	-	-	-	-	-	-
1832	-	-	-	-	-	-	-	-	-	-	-	-
1833	1	-	1	1	-	1	-	-	-	-	-	-
General Total -	66	17	83	5	1	6	—	—	—	4	1	5

Note.—There is no record of any children having suffered from inflammatory or eruptive disorders during vaccination at the Asylum. Of the five children who died of small-pox at the Asylum, *three* had the disease after reputed small-pox, and *two* had never been vaccinated or undergone small-pox before. The boys are admitted into the Asylum from the age of *five* to *ten* years, and the girls from *five* to *eight* years. Both boys and girls usually quit the Asylum on attaining their fourteenth year. All the girls were transferred to the Asylum at Southampton in June 1823.

Sam. Geo. Lawrance,
Surgeon, Royal Military Asylum, Chelsea.

LONDON SCHOOL OF HYGIENE
AND TROPICAL MEDICINE
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